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MENTAL HYGIENE

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QUARTERLY MAGAZINE
OF
THE NATIONAL COMMITTEE FOR MENTAL HYGIENE, INC.
50 UNION SQUARE, NEW YORK CITY

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MENTAL HYGIENE will aim to bring dependable information to everyone whose interest or whose work brings him into contact with mental problems. Writers of authority will present original communications and reviews of important books; noteworthy articles in periodicals out of convenient reach of the general public will be republished; reports of surveys, special investigations, and new methods of prevention or treatment in the broad field of mental hygiene and psychopathology will be presented and discussed in as non-technical a way as possible. It is our aim to make MENTAL HYGIENE indispensable to all thoughtful readers. Physicians, lawyers, educators, clergymen, public officials, and students of social problems will find the magazine of especial interest.

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MENTAL HYGIENE

VOLUME I

1917

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MENTAL HYGIENE

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FOREWORD

A FEW years ago little more than a newly coined term, today mental hygiene denotes a wide field of practical effort in dealing with humanity's most difficult tasks. The part played by mental factors [illegible] certain kinds of failure in social adaptation has long been recognized. Society, in even its most primitive phases, has always been ready to modify its method of dealing with those in whom mental disease or mental defect is obviously responsible for difficulties in adaptation. Today, however, a general realization is coming into existence that mental factors underlie not only inability to make a living and the gross disorders of conduct but all the social activities of man. Today we realize that human behavior can be neither successfully studied nor effectively directed without taking into account the facts of mental life.

On every hand are to be found practical illustrations of the application of knowledge of the mechanisms of the mind to the affairs of the individual and of society. New information in this field of knowledge no longer benefits only the mentally sick. In the children's court, the prison, the school, the factory—in short, wherever intelligent attempts are being made to direct human activities—there will be found patiently at work those whose task in life is the study of the human mind in health and in disease. Much of such work is tentative, most of it is yet carried on with slender means and meagre equipment but it represents man's sanest enterprise—that of facing squarely the issues raised by his own mental inadequacies and deviations and dealing with them upon the level in which they originated.

It is with this wide field of effort that mental hygiene concerns itself. The recognition of preventable causes of mental disease and mental deficiency challenges us to win in the field of mental hygiene victories comparable to those won in general hygiene and modern sanitation. New ideals in the care and treatment of persons suffering from mental disorders impose new obligations which are being met by the professions most intimately concerned and by the public authorities who must provide the needed resources and facilities. The widespread determination to control feeble-mindedness, so that this preventable evil will not shadow new generations as it has our own, presents problems of medicine, law, education and statesmanship which, for the good of the race, are being vigorously attacked. The inability of mentally defective children to acquire knowledge in the schools has led to the formation of special classes and the extension of institutions for permanent care, means by which this problem can be effectively dealt with. We have come to see, however, that the schools hold children who are fully able to acquire information at a satisfactory or even an extraordinary rate but are quite unable to make the relatively simple adaptations to other situations in life which the school presents. The histories of countless failures of adaptation in later life show so unmistakably that the first conflicts occurred in the school room that the mental clinician is asking permission to conduct his work there and, moreover, is receiving an enthusiastic welcome on the part of the educational authorities. The failure to deal successfully with crime by methods which have been given centuries of trial has brought into existence a new criminology and a new penology of which the central feature is the study and re-establishment of the individual delinquent—essentially a problem in mental hygiene. These are some of the fields in which practical work in mental hygiene is being carried on at the present time. Attempts to define the extent of such problems as the few which have been mentioned, to find favorable approaches and to deal with them at first hand are enlisting the services of a steadily increasing number of devoted workers. In addition there is a large and rapidly growing number of intelligent persons, in greatly diversified walks of life, who are deeply interested in special phases of these enterprises and who desire to inform themselves regarding their progress.

There can be no doubt that the time is fully ripe for a publication in which the problems of mental hygiene can be presented, work under way described, and important discoveries made known to the public. The National Committee for Mental Hygiene seeks to encourage in every useful manner work for mental hygiene. Sometimes this can best be done by making a survey; sometimes by collecting the most complete and authoritative information available upon a specific topic; sometimes by initiating work in a new field; sometimes by securing public support and official recognition for work which might not succeed without such aid; sometimes by undertaking an experiment to show the usefulness and practicability of tasks which others hesitate to undertake. Often the organization performs these functions best through the affiliated State Societies for Mental Hygiene which already exist in sixteen states and often through independent agencies, official or otherwise, which are engaged in related activities. In whatever way such aid is given, nevertheless, the plans for work, the difficulties and successes encountered, the expression of public support or disapproval and the records of actual accomplishment come sooner or later to the attention of the National Committee for Mental Hygiene. It seems, therefore, the clear duty of this organization to publish such a periodical. The task is undertaken with a firm conviction that MENTAL HYGIENE will not only give new impetus and support to the present widespread determination to deal with mental factors in all the important relations of life but will very greatly increase the public knowledge of mental problems, of their bearing upon the welfare of the individual and of society, and of the work which is being done to define or to solve them.

MENTAL HYGIENE will aim to present non-technical articles and reports by recognized authorities. It will republish from time to time noteworthy contributions to our knowledge of mental disorders which would otherwise be out of reach of the general public. It will review important books and it will serve as a medium for the first publication of the results of original investigations undertaken in this field. It is our hope that MENTAL HYGIENE will prove equally useful to the highly trained worker in psychiatry or psychology, the physician engaged in preventive medicine, the teacher seeing in education preparation for life, the magistrate concerned not only with the consequences but the causes of the offense before him, the parent seeking knowledge of the mechanisms by which character is built, and the student of social problems desirous of understanding the complex fabric of organized society through knowledge of those factors which mould the mental lives of individual men and women.

THE WIDER FIELD OF WORK OF THE NATIONAL COMMITTEE FOR MENTAL HYGIENE*

LEWELLYS F. BARKER, M.D.

President of the National Committee for Mental Hygiene

TODAY I shall ask you to look for a few minutes at the wider field that this National Committee ought sooner or later to cultivate. The earlier annual meetings of the Committee were devoted chiefly to planning the work to be done. Recent annual meetings have been given over largely to discussions of certain concrete problems that the Committee had undertaken to solve, especially the problem of surveys of conditions as they exist in the United States for the public care and treatment of the insane and the feeble-minded. You will recall the plans that were made for the study of (1) the methods of administration and supervision, and (2) the laws that deal with the treatment of persons suffering from mental disease or from mental defect. During the past year this survey-work has been pushed vigorously. The results of surveys thus far made have been so helpful that governors of states, state boards of control, state societies for mental hygiene, and others interested in the welfare of the insane and of the mentally deficient, have sent invitations to our Committee to undertake, as soon as possible, surveys in many of the states not yet studied. This survey-work has now gained an impetus that insures its extension, within a reasonable period, to the country as a whole. Though it is true that the surveys have dealt, thus far, more with the conditions under which the insane exist than with those pertaining to the feeble-minded, still enough observations have been made upon the latter to show the pressing need of a thorough study, everywhere, of the provisions for the care of the feeble-minded; and they suggest, too, that investigations should be undertaken, also, along certain new lines in addition to those that have thus far been followed.

The time has now probably arrived when this National Committee, besides following up work already begun, may well give serious attention to plans for the extension of its work to other domains. Those most interested in the whole subject have had clearly in mind, from the time of establishment of the Committee, the fundamental principles that underlie mental hygiene in its wider sense. Writing four years ago of the scope of our work, I defined a campaign for mental hygiene as "a continuous effort directed toward conserving and improving the minds of the people; in other words, a systematic attempt to secure human brains so naturally endowed and so nurtured that people will think better, feel better, and act better than they do now"; and I stated that, broadly conceived, the general problems of mental hygiene are "first, to provide for the birth of children endowed with good brains, denying, as far as possible, the privilege of parenthood to the manifestly unfit, who are almost certain to transmit bad nervous systems to their offspring—that is to say the problem of eugenics; and second, to supply all human beings from the moment of fusion of the parental germ cells onward, and whether ancestrally well begun or not, with the environment best suited to the welfare of their mentality." The consideration of these two great problems, including, as they do, the influences of heredity on the one hand and of environment (physical, chemical, biological and social) on the other will point the way to concrete work for a National Committee like ours not only during our life-time but for centuries to come. We must begin by collecting facts; we must make these facts known to the people of the United States; and we must organize agencies through which the people may be helped in applying them.

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*Remarks made at the eighth annual meeting of the National Committee for Mental Hygiene, New York, February 2, 1916.

It will not be possible, of course, even should larger means be placed at our disposal, to undertake, at once, work along all the lines that might profitably be pursued. Whatever work we undertake should be thoroughly well-organized, carefully planned in advance; once started, it should be continuously sustained. We must avoid making the mistake of engaging in work that we are not prepared properly to prosecute.

There are many urgent needs for the application of modern psychiatric knowledge to social problems; I hope that before long we may be able to undertake to satisfy at least some of these needs. In 1912, I referred to a number of the problems the consideration of which might well, sooner or later, occupy our attention. Among them may be mentioned: (1) the marriage of people with psychopathic tendencies; (2) the relations of puberty, of pregnancy, and of the climacteric periods to mental hygiene; (3) the pedagogic problems connected with children presenting a lower degree of educability than normal; (4) the psychology of the adult criminal and the relations that exist between crime and mental disorder; (5) the psychiatric study of juvenile offenders; (6) the coöperation of psychiatrists with the best legal talent in the revision of law-codes; (7) the psychiatric study of inebriates, paupers, prostitutes, and sexual perverts and a consideration of their sources; and (8) the study of the conditions, hereditary or environmental, that lead to the less outspoken instances of social maladjustment, including those of the psychoneurotic patients that crowd our hospitals and sanatoria, and those of the large group of persons that, owing to anomalies of character and conduct, provide material for the news-columns of the sensational press.

One important task will be to bring conviction, first to medical men, and later to the general public, that anomalies of feeling and abnormalities of behavior are as much subject to natural laws as are disorders and defects of the intellectual processes. I have been more than once surprised to find that even neurologists and psychiatrists may sometimes be wanting in this insight; whereas they could readily understand and forgive intellectual defects, they assumed an entirely different attitude toward pathological emotions and the feeble or perverted will. Until our neurologists, psychiatrists and medical men generally come more into agreement concerning the affective life and the conative functions, the origin of motives and the explanations of conduct, we can scarcely expect the public at large to bring their ideas of responsibility, of the nature and purpose of punishment, and of the methods for opposing and preventing crime, into accord with the conceptions of modern psychiatry. Let us hope that the work of the new psychiatric clinics already begun and of those soon to be established may, before long, so clarify the minds of the members of the medical profession that medical opinion in every city, town and hamlet in this country may, regarding these fundamental matters, become sufficiently uniform to influence strongly in the desired direction the opinions of the people as a whole. We may then reasonably hope to institute at least some of those reforms, the urgent need of which psychiatrists now foresee, and for the beneficence of which they are willing to vouch.

UNDERLYING CONCEPTS IN MENTAL HYGIENE

WILLIAM A. WHITE, M. D.
Superintendent, St. Elizabeth's Hospital, Washington, D. C.

UNTIL the present generation, the study of mental diseases has been to medicine a thing apart—despite emphatic statements to the contrary by some of the medical men who followed this specialty. The very fact that mental disease was largely coextensive with insanity in the popular estimation and that insanity involved segregation in a public institution necessarily separated the practice of psychiatry in a very material and effective way from the other medical specialties.

While I believe that this separateness of psychiatry has been based to some extent upon the philosophical doctrine of psychophysical parallelism, which raises what I have called a pseudo-problem in philosophy, and as Adolf Meyer has aptly said raises a "medically useless" distinction, it is my contention that this separateness has been largely furthered by the concept of insanity itself. It seems to me that the concept of insanity has no longer, if it ever had, any medical usefulness. In other words, the concept "insanity" is not, in my opinion, a medical concept at all, but solely a legal and sociological concept. The designation "insane" is only properly applied to patients who have been declared insane by due process of law. They therefore come to make up a certain social class, burdened by a specific legal disability. Insanity is therefore to all intents and purposes synonymous with certifiable mental disease and the word tells us no more about the individual than that he suffers from a disorder which in his state, at the present time, under existing laws, may cause him to be sent to an institution for the insane.

As a social class we know nothing more about the insane, as set apart by this concept of "insanity," than we know of any other social class, as for example, bookkeepers. On the other hand, if we use "insanity" as a medical term at all we certainly can use it only as the name of a group of symptoms or of a certain type of conduct which is certifiable. As such it gives us no more specific information about the individual than would the terms fever or cough if they were similarly applied. The social definition of the term "insanity" deals entirely with a certain type of conduct, in general that which is socially destructive in its tendencies. It makes no difference to the community what a man thinks or, for that matter, what he suffers mentally. He may think all he pleases of acts of violence, for example, but let him so much as threaten to put such thoughts into action and the community becomes interested at once. It is not what goes on in a man's mind, it is what is expressed in his conduct that is of social significance. So the term "insane" only designates certain symptoms and certain types of conduct and it is readily seen that it is by no means coextensive with the term "mental disorder." Many types of mental disorder (and some of them, the most serious) do not at all lead to that type of conduct disorder to which the term "insanity" is applied, while, on the other hand, there are many types of conduct disorder (criminal acts) which do not raise the issue of insanity in the popular mind.

Thus if we come to think about it and realize that the term "insanity" is used as if insanity were a disease, thereby implying that the whole group of people that we find in institutions for the insane are all suffering from the same disease, the concept becomes little else than ridiculous when confronted by our present day knowledge of psychology. To believe that the human mind is susceptible only to one disease, or else, to put it more exactly, that all of the individuals in our institutions for the insane have one disease, is to fail utterly to grasp the meaning of mind at all.

With the passing of insanity as a medical concept, the way is at once opened up for a consideration of the whole question of mental disorders, no longer hampered by arbitrary lines of division which begin or end at the door of the asylum. As a result we are enabled to see the problem in an immensely broader way, which illuminates the whole subject of the meanings of reactions at the psychological level.

In order that we may be scientifically oriented toward the subject of mental hygiene, let me pause to indicate what I mean when I speak of reactions at the psychological level. If we consider for a moment the pathway along which biological phenomena have finally found a culmination in man we may admit, for purposes of description, that the earliest types of reactions of living things were largely physical. That is, such reactions as those which depended upon the amount of moisture in the environment, upon the temperature, upon expansion and contraction, and the like. Very early, however, perhaps from the first, they assumed in addition a chemical or a physico-chemical character; the problems of nutrition, and of metabolism are found in the unicellular organisms and are confessedly of a chemical and a physico-chemical character. The nervous system came into existence relatively far down in the animal scale, and when we first find it we see a very simple series of ganglia and nervous cords, which, in their earliest phases, had largely to do with problems of nutrition. Probably these simplest forms of nervous systems were more nearly comparable with what we call in the human being the sympathetic, or vegetative, nervous system. It is only relatively late in animal development that we find the central nervous system and last of all that we find evidences of anything to which we can properly give the name of psyche.

From this evolutional point of view we may consider, for descriptive purposes only, the various functions as we see them exhibited in man. The physical reactions are such as are involved in the maintenance of the erect posture, the relation of the various curves in the spinal column, the adaptation of the joint surfaces to one another, and numerous other reactions of similar nature: the chemical and physico-chemical reactions still deal largely with questions of growth, nutrition, and metabolism. The central nervous system functions occupy a still higher place and serve for bringing about larger co-ordinations between the various parts of the body; while the psyche manifests itself in all mental functions at a level hardly even approached by any of the lower animals.

If we will take the broadest concept of the relation of the individual to his environment and of the functions of these various levels, if I may so call them, we will see at once that the individual is always endeavoring to bring about an adjustment between himself and his surroundings, and that in order to do this he is always in a position where it is advantageous to be able to concentrate all efforts in a given direction and make everything subservient to that particular end. The first function is that of adjustment. The second function is that of integration, and at each level we find the functions of the organism serving both of these ends. As we proceed from the physical through the various nervous levels to the psychological level we find that each series of functions, as they increase in complexity, also serve more thoroughly and more efficiently to integrate the individual and therefore make it possible for him to bring all of his energies together and concentrate them upon a specific goal.

At the same time this function of integration is the very necessary pre-condition to efficiency of adjustment to the environment.

If I were to illustrate the type of instrument which man uses at the various levels to bring about these two ends, namely, adjustment and integration, I should name first, at the physical level, the *lever*. This is exemplified by the type of action between muscles and bones which serves the purpose of integrating man's framework so that he may direct his exertions toward any particular end he wishes and thereby effect to that extent an adjustment with his surroundings. At the next level, the physico-chemical, the *hormone* is the type of instrument which is used to effect these two purposes. The chemical regulation of metabolism is a means whereby the body is related to itself in its different parts so that it grows and develops as a whole, each portion receiving and utilizing only its proper amount and character of nutriment to serve the specific purpose of the development of that part in so far as it may be useful to the whole organism. Integration is thus served, the organism as a whole is raised by this integration to a higher level of efficiency and thereby adjustment with the environment to a greater nicety is rendered possible. This hormone regulation which is effected through the medium of the endocrine glands is already, in higher animals, very largely under the control of the vegetative nervous system. So even at this level we are dealing with nervous control. At the next level, the level of the central nervous system, the *reflex* is the type of instrument which is used. The reflex is brought into action by contact between the individual and the environment. It may be simple, it may be compound, it may be conditioned or unconditioned, but it is by building up series of intricately interrelated reflexes that the organism comes to respond accurately to certain aspects of its environment. It is needless to illustrate further how this process of compounding of reflexes serves both the purposes of integration and of adjustment. Still higher and further advanced in the course of evolution the type of instrument which is brought into play to effect these two purposes is the *idea*. The idea not only integrates by keeping before the individual the goal which he is endeavoring to reach and thereby serving to bring all his forces to bear to that specific end, but it also reflects the environment much more accurately than can the stimulus which brings about the reflex and thereby leads to a much finer adjustment. And last of all we have arrived at that region which

Spencer called the region of super-organic evolution, the region of social psychology in which conduct gets its values from the approval or the disapproval of the community of which the individual forms a part. The type of instrument which is used at this level to effect the double purpose of integration and adjustment is the *social custom.* Customs serve to integrate society rather than the individual perhaps by binding all its units together to a common end, but in so doing they serve also to effect a more efficient adjustment of the individual to the requirements of the community.

It will thus be seen that in the process of evolution there is an orderly progression from the lowest to the highest types of reaction until they culminate in the reactions, as I have put it, at the psychological level and reactions at this level take on social values.

While the individual may properly be considered as a biological unit, still the brief summary which we have given of the evolution of his various types of reaction shows a constant interplay between the individual and his environment which precludes the possibility of considering the individual as apart from the environment. This impossibility is especially to be borne in mind when the individual is considered as a social unit and his reactions are considered from the standpoint of the social level.

All this is preliminary but necessary to the understanding of the place that the psychological type of reaction occupies in the general scheme of the individual's development and it is also necessary to the understanding of how, by a process of evolution, the type of reaction which the individual manifests gets its values reflected from the social community. Conduct is the basis upon which the community judges the individual. The individual may think as he pleases and the community has no interest in his thoughts, but he must act along fairly well defined lines if he expects to be left undisturbed. Conduct, therefore, has a social value and its social value is based upon its worth to the community. Every individual owes certain duties to the community in which he lives in return for the immense benefits that that community bestows upon him. Practically all of the things for which we consider life worth living are made possible by the social organization, and in return for all these gifts from society the individual has a duty towards that society. It is upon the basis of the efficiency with which he discharges this duty that society passes judgment upon his conduct and deals with those departures from certain standards which it sees fit to maintain.

From this standpoint we see the individual evaluated on the basis of his usefulness to the community as expressed in his conduct. Conduct is essentially psychological, at least in its final manifestations, and so it is proper to inquire whether all forms of social inefficiency may not be viewed, and properly viewed, from the standpoint of mental deficiency. The so-called insane, and the various grades of feeble-minded are already viewed in this way, while there is pretty general agreement that approximately fifty per cent of criminals and an equal per cent of prostitutes might easily be brought under such a classification. To my mind it will be useful to look at all the socially inefficient classes in this way. We will have no trouble in doing this if our judgment is not hampered by the preconceptions of the old-time "insanity" concept. In other words, if we can look upon mental inefficiency in the broad way in which I have indicated, rather than from the narrow point of view of certifiability, we shall commence to understand and to deal effectively with the socially inadequate.

If we take this viewpoint for the moment and look at the fifty per cent of asocial individuals and realize that they cannot live in the community as useful citizens but have to be shut up in some form of institution and then place this fact by the side of our scheme of evolution of reactions, we see instantly that these individuals fail at the social level. It is not necessary to find in such persons evidences of mental defect which show themselves at what I have called the purely psychological level. Many such individuals are well behaved, well conducted, and, relatively at least, efficient persons within the milieu of an institution. Subjected to the increased complexities with the resulting stresses of social life, however, they show immediately their inability to make adequate adjustment. They fail at the social level of adjustment, and to say that this failure is not psychological is to lack in appreciation of what psychological means. Of course I am intentionally refraining here from discussing the moral issue.

Now let us go to the extreme. Let us take the cases of a pauper and a criminal. Each fails to make a satisfactory social adjustment. The only difference between the two types of failure is a difference in the particular way in which the failure has come about. In one instance there has been a positive offence against the standards of the community, and in the other not. The intellectual level, or the depth of defect from which the individual suffers may be the same in both instances. Let us, however, take as an example the individual who has gone to the poorhouse because he can no longer earn his living; perhaps he has lost an arm or a leg, or his vision, or some other organ or function upon which he has been accustomed very largely to depend. One would naturally say that such a case certainly showed no psychological evidences of deficiency—that the difficulty was entirely physical. I do not think that is a fair way to judge the situation.

I have in mind Miss Helen Keller, who in her earliest infancy was striken absolutely blind and totally deaf. This young woman today is not only a highly respected and much loved member of the community, but she is highly efficient. She writes beautifully, she takes the lecture platform effectively, and she has trained her other senses to take the place of those which were lost in a manner that is nothing short of marvelous. She gets from life all of the wonder that a highly cultured and highly educated individual can with his senses intact, and vastly more than the average normal individual. Now when we see a person (perhaps he is a blacksmith, it matters not) go to the poorhouse because he has lost an arm, the only reasonable explanation that we can give for such conduct is that his inefficiency is psychological. We may express it in such common terms as "he has lost his nerve," or "he is unequal to making a readjustment," or "he is too old to begin over again," or a thousand other formulae, but reduced to their least common divisor, to resort to a mathematical figure, the element which all of these formulae contain in common is the element of mental inefficiency.

I will not burden you further with what I am afraid you will consider to be a rather tedious and somewhat philosophical discussion of what ought to remain upon practical grounds, but it seems to me a very valuable thing to get a viewpoint of the individual along the lines that I have suggested. It is only when we begin to see the true meanings of failures in life as they surround us that we are able to approach the problem of mental deficiency in a practical way through the natural avenues. The main emphasis of the argument should be upon the fact that socially efficient conduct is an end-result, depending, not alone upon psychological integrity, but back of that upon integrity at all the various reaction levels as I have described them. Each level is dependent upon the one beneath—its historical antecedent. Conduct is the end-result of the whole complex of mechanisms and resulting compromises and its efficiency is a function of their integrity.

In the preface to our recent work on the Diseases of the Nervous System,* Dr. Jelliffe and I have said: "Man is not only a metabolic apparatus, accurately adjusted to a marvelous efficiency through the intricacies of the vegetative neurological mechanisms, nor do his sensori-motor functions make him solely a feeling, moving animal, seeking pleasure and avoiding pain, conquering time and space by the enhancement of his sensory possibilities and the magnification of his motor powers; nor yet is he exclusively a psychical machine, which by means of a masterly symbolic handling of the vast horde of realities about him has given him almost unlimited powers. He is all three, and a neurology of today that fails to interpret nervous disturbances in terms of all three of these levels, takes too narrow a view of the function of that master spirit in evolution, the nervous system."

Mental hygiene is therefore the last word in preventive medicine. The asylum, the prison, the poorhouse are where we find the results of failure. Such types of failure as are represented in these institutions will, of course, always be with us, but the work of mental hygiene is not primarily with these except in so far as they are salvable. Mental hygiene is primarily addressed to preventing such failures wherever possible.

For a great many mental disorders, especially the various types of "nervousness" and the so-called "functional" conditions—the benign as opposed to the more serious types founded upon marked defect—for such conditions, especially among adults, the public hospital for mental diseases, the psychopathic clinic, and the public dispensary are the natural avenues through which to extend help. It will take some little time, however, and some effort before the mass of people know that such agencies exist or are available and also some little time and effort before there are enough of such agencies or those that do exist are prepared to meet the demands. For the more serious conditions, particularly for the frankly defective states, the school is the place in which to work. Here the individual is found at an early age when remedial agencies will be effective, if ever. If such agencies are ineffective then, steps can be taken to save to society an enormous amount of otherwise wasted energy in trying to make a useful citizen out of material that can never arrive.

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* Jelliffe and White: Diseases of the Nervous System. A Text Book of Neurology and Psychiatry. Published by Lea & Febiger, Philadelphia and New York, 1915.

In this connection there must be considered the whole problem of education. The study of the atypical and subnormal child has brought into relief certain vital problems in our educational scheme. Many modifications are already working throughout this scheme and it is ever coming nearer and nearer the ideal of fitting the educational treatment to the individual rather than expecting all individuals to fit the same educational mould. We would not think of prescribing mountain climbing to a person with a broken cardiac compensation: we should be as careful in our educational prescriptions. Here comes also the problem of vocational training, a still more specific attempt to make educational means serve living ends.

Going deeper still all problems of factory sanitation, of the employment of women and children, of employers' liability acts, of workingmen's insurance organizations, of dangerous occupations, of compulsory education and innumerable others, all take on a new aspect when viewed in the light of the ultimate goal, the end product of individual development, socially efficient conduct. Viewed in this light they are all problems of mental efficiency, and so, from this angle, belong to the field of mental hygiene. This is true too of eugenics which, it seems to me, is a worse than useless type of effort unless it rests upon the broadest of foundations.

From this higher plane of observation the criminal law that punishes is unintelligent. Disorders of conduct need constructive handling. To destroy the individual either by capital punishment or by the slower process of constant repression is a low level means of meeting the situation.

The mental hygiene movement has as one of its functions the encouragement of all those lines of inquiry and research that lead to a better knowledge of the human being, particularly of his conduct reactions. It is the task of mental hygiene to find less wasteful, more efficient means for dealing with the problems that arise at this level and, when found, to urge such measures unceasingly upon those who make and administer our laws and who direct the trends of public thought.

UNEMPLOYMENT AND PERSONALITY—A STUDY OF PSYCHOPATHIC CASES

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A WORD of explanation may be required in order to make clear just why an alienist occupies himself with the subject of unemployment.

With the attention at present given this ever-growing problem it is obvious that more than a passing acquaintance with the subject is required for even an intelligent appreciation of its significance. It is not intended that this report be considered an attempt to ascertain the fundamental causes of unemployment, but rather the attempt has been made to analyze in part on the basis of their personality a selected number of persons for whom unemployment was a serious problem. The Boston Psychopathic Hospital, with its annual admission rate of about two thousand and with fifteen hundred in the out-patient department, offers an unusual opportunity for studying the extreme cases of social difficulties of many types. Among these, unemployment has appeared not infrequently. It was thought that certain results might be obtained if the careful medical and psychiatric studies of the Psychopathic Hospital patients were made use of in interpreting some of their social difficulties. The difference between studying this sort of material and the much more abundant material obtained in the employment agencies, labor headquarters, court rooms, etc., is that the Psychopathic Hospital patients are subjected to uniform and fairly searching examination, at the completion of which a very fair idea may be had of the physical and mental equipment and shortcomings of the different individuals. This study, therefore, will not lead to an understanding of the economic causes of unemployment, but it is hoped that it will help pave the way to an understanding of the kind of individual who is likely to get into economic difficulties, the particular kind of difficulty he is likely to meet with, and the sort of situations in which it will be most apt to occur. Furthermore, it must be said that only a part of the patients admitted to the Psychopathic Hospital suffer from mental diseases. A great number of patients are admitted who are suffering from feeble-mindedness, psychoneuroses or borderline conditions. However, all of them show the effects of fairly definite psychopathic tendencies. The study of these extreme types will often show in an exaggerated way, and, therefore, in a way that will impress the observer, difficulties of personality and of career which in a more nearly normal individual might hardly be considered significant.

The work on which the following report is based consisted of an analysis of one hundred cases of unemployment which had been received as patients in the Psychopathic Hospital. These were unselected cases so far as the diagnoses or the nature of the employment difficulties were concerned. The only selection exercised was in regard to age and sex. Only males of from twenty-five to fifty-five years of age were included. These cases were tabulated in the order in which they were received at the hospital. Each patient was subjected to the routine examinations of the Psychopathic Hospital, which consisted in a complete physical examination, a complete mental examination, a psychological examination, with intelligence tests to determine feeble-mindedness, supplemented by a history of social service investigation. The physical examination in each case included a Wassermann test of the blood, and, where that proved positive, lumbar puncture was performed. It was thought that with cases worked up thus thoroughly it might be possible to draw certain correlations with their mental condition and their employment difficulties.

It was not possible in each case to obtain the information with the degree of accuracy and detail that was often desirable; this in spite of the fact that the routine examinations are as thorough as the patient's circumstances will permit and much more thorough than is ever possible in an out-patient service. Perfection in this regard is not only difficult, if not impossible, to obtain, but perhaps even undesirable. There is great danger of amassing evidence to such an extent that one fails to see the wood for the trees. It is to be expected that a survey of one hundred cases, even if it is performed only in the brief fashion here possible, will show certain fundamental correlations. These correlations, while they may appear to be quite accidental and the result of extraneous circumstances, by their continual recurrence assume a more definite significance. Thus, for instance, one of the first distinctions it is important to make is the distinction between behavior and the reasons given by the participant for his behavior.

The legal point of view, which considers every individual responsible for his acts until proven to the contrary, is still dominating our thoughts in regard to social difficulties. Consequently, since a person is responsible, his own account of the reasons why he did a certain thing must be considered of great importance. This point of view is one which is shared also by a number of psychologists and psychiatrists. These belong, on the whole, to the group of introspective psychologists. According to their ideas an individual should always be able to give an account of the reasons for his conduct. He often may not be able to do this without much study or even assistance, but in the end he should arrive at a satisfactory, conscious explanation.

There is a great deal to be said in favor of this view. None the less, it is not the only possible solution, and has one serious disadvantage in its application to such a problem as unemployment in that the time consumed in explaining a single case and bringing into consciousness all the reasons for the conduct disturbance, if it is possible, is prohibitive. At the rate at which the best of the psychoanalysts work it would not be possible properly to study in the course of the year more than a dozen cases. Furthermore, the results of such work are of importance purely for the individual, and no generalizations can be drawn therefrom. Each person's story has to be studied by itself. Therefore, at the end of the year one has an enormous amount of detailed knowledge about a few cases, and all the other cases that might have come before the examiner for attention have to go without any assistance whatever. Also, no generalizations being possible, it is a matter of piece work; to study one hundred cases according to this method would require the efforts of fifteen to twenty psychologists on full time for many months.

It seems clear, therefore, that the only possible way to attack this problem is by the other method, namely, the psychiatric method. This method presupposes that human conduct, like conduct or behavior observed anywhere in the organic world, is dependent upon fundamental reactions. These reactions may be combined into complex forms which may baffle analysis. Above all, one should note that the fundamental concept of organic activity requires the participation of at least two forces more or less directly opposed. This opposition of forces is continuous or intermittent, and, in perfect repose, is in equilibrium. When the equilibrium is disturbed in one or the other direction, action ensues. Thus, in our muscular system we find muscles that perform opposite functions so placed as to balance each other's pull. A member is flexed, not by the action of the flexor muscles alone, but by the increased tension of the extensor muscles. Both the flexors and the extensors are active, only the flexors are a little more active. Complete relaxation of the muscles occurs only in deepest unconsciousness. In the same way one may assume that the mental activities are more or less in equilibrium, and this applies principally to the instincts and the emotions. The emotions are associated with the conscious mind, but also more fundamentally with other functions of the body, so that an emotion may be evoked by other than psychic disturbance. The mental content will be correctly associated with this, except in complete dementia. Ordinarily, emotional impulses are well correlated with conscious mental processes, so that on the receipt of unpleasant news and in the face of a pleasant experience the corresponding emotions are experienced. On the other hand, emotional impulses may arise from causes outside of the mind, outside even of the subconscious mind in the meaning of the psychoanalytical school. Thus, for instance, one may wake up in the morning feeling depressed. This may be due to purely physical causes and need not be necessarily due to supposed complexes, as Sigmund Freud maintains. The work of Dr. Cannon at the Harvard Medical School on the rôle of the ductless glands in pain, hunger, fear and rage has shown at least one way in which this may occur. When such an emotional impulse is aroused, the whole human being resists it. He tries to free himself from it as soon as possible, and does so by many devices, such as following his routine occupations, interesting himself in his work, seeking distraction by conversation with interesting, stimulating persons; but, whatever he may do to relieve the emotional tension, he does not allow it to affect his conduct in any serious way. His inhibition, his judgment, whatever it is that he uses, is sufficient to oppose these tendencies up to a certain point. There is, however, a threshold above which he can no longer inhibit. If the stimulus is strong enough, therefore, the individual would not be able to resist. Just where this threshold or this breaking strain lies has to be determined in each individual.

Normal individuals show a certain range of variation in this respect. In fact, a single individual may at different times show a variation, but ordinarily these variations are within comparatively narrow limits, so narrow that it has been possible to construct a huge code of laws which without great injustice fits practically all the normal members of the community. When this threshold varies, however, beyond these limits, then conduct results which is sufficiently outside of the normal limits to call for attention. It is very important, however, to realize that such variations, while they may be fundamental, congenital, and even more or less fixed, are not absolutely fixed and permanent. Were this not so, the problem of dealing with the deviates would be greatly simplified. Then it would be merely a matter of rounding them up and either executing them or at least segregating them. The difficulty in the management of delinquency is caused chiefly by the fact that individuals vary somewhat in their ability to fit into the existing community and that, therefore, an appearance is created that their misdeeds are intentional, and that the best remedy is to teach them the stern lessons of reality by making them suffer for their acts.

This method has failed all along the line, and nowhere more than in the treatment of unemployment. The corrective measures that are applied to cases of unemployment are usually methods of teaching by experience. The individual gets into difficulties and, where the authorities become interested, pains are taken to convince him, in order to prevent their recurrence, that these difficulties are the results of his own ill-judged acts. The recurrences, however, are noted and investigated and attention is gradually withdrawn from the delinquent and efforts are made to prevent his dependents or neighbors from suffering the consequences of the delinquencies. The only art, apparently, that is used in the corrective measures employed consists in tempering the severity of the reactions to the delinquent. So, while on the one hand we say to the individual, "You must not do this again because if you do you will suffer starvation and exposure and perhaps death," at the same time we temper this by preventing his dying of exposure or starvation and even by maintaining the family though inadequately, during his unemployment. Nature's remedy is to let events take their full course and to exterminate the weakling who cannot learn by experience. We have a horror of such methods and object to death as a penalty. We do not, however, sufficiently modify the rest of the treatment to make it very effective.

As a first step, therefore, in determining what could be done in the way of corrective education, it is necessary to determine the exact nature of the individual in question in regard to his ability to learn. To do this we have analyzed one hundred cases in such a way as to group all the patients under three headings. The headings indicate in a very schematic way our opinion as to their character or personality. The first of the three classifications is the *paranoid personality*. Under this heading are grouped all individuals who have shown by their conduct that their reaction to the world is entirely egocentric. No matter what they experience, no matter what they desire, their own ego is in the centre of the plot and dominates everything. This may be associated with a variety of emotional reactions so that the resulting picture is a varied one. It includes individuals who are convinced of their own ability. They are always ready to undertake new schemes, they are usually working for the betterment of the rest of the world and claim all sorts of altruistic motives, and even may be altruistic to some extent, seeking merely the satisfaction of being in the limelight. Or the emotion may be a depressed one and the individuals are contentious, surly, suspicious, claim abuse, ill-treatment, recognize no kindness that is done them, appreciate no favors, etc. This is by far the largest group in our table, comprising forty-three cases, or almost half.

The next largest group, which we call *inadequate personality*, comprises cases which show evidence in their conduct of a lack of judgment, a lack of intelligence. Under this heading are placed all cases which have been shown by the psychological tests to be defective or feeble-minded, or those suffering from a deteriorating disease other than manic-depressive insanity or the paranoid psychoses.

Finally, we have a third group, which we have called the *emotionally unstable group*. Under this heading we have included all the cases that show sufficient mental ability and judgment to satisfy the ordinary demands of life and who have no marked tendency to the egocentric attitude or to enlarge upon their own significance, accomplishments, or the jealousies of others. These include individuals who show excessive emotional reactions, who at times are buoyant beyond all reason, and while in this condition show considerable psychomotor activity. Their minds are very active, they have many new ideas, they have a marvelous imagination, they undertake a dozen different obligations, none of which they can carry out. They tire of one thing before it is half begun and go rapidly to another. In another mood, the equivalent of a depression, the more pronounced cases may show a slowing up of the mental activity, an interference with thought, a lack of initiative, a tendency to be unhappy, a brooding disposition. This group of individuals also often exhibit violent outbursts of temper. They are extremely irascible, usually on account of some external provocation. The latter may be very slight. The reaction, however, is always extremely violent. Impulsiveness, amounting often to obsession, is frequently found in these cases. Throughout these changes, whether they are hypomaniacal or depressed, they assume an attitude toward the rest of the community which is that of more or less self-effacement and modesty. The normal individual reacts to another in a friendly fashion if he considers him modest. Every politician knows this and uses little tricks in order to show how unassuming and democratic he is. Universally detested, on the other hand, is the person who appears to be conceited and arrogant, who has an idea of self-importance. A behavioristic distinction may roughly be applied to these cases: that the paranoid personality is one with which we may sympathize, but dislike; the emotionally unstable individual, on the other hand, is one that may be extremely annoying to have about, that causes untold trouble, not to say misery, and yet that is very likable.

With this in mind, it is not surprising that the emotionally unstable group contains only twenty-two cases. The inadequate group, on the other hand, contains thirty-five cases. The inadequate and paranoid together, therefore, form seventy-eight per cent of the cases studied. It is not likely that these figures represent the conditions in the community at large, possibly for the reason that in the first place an emotionally unstable individual in the hypomaniacal condition is a very useful citizen and is not likely to get into difficulties unless his trouble becomes more intense. Also, on account of the fact that these people are all very popular, their friends and acquaintances will gather about them in times of need and will by united efforts keep them "on the job." With the paranoid individual this is not so. The paranoid individual gets into difficulties and one is glad to get rid of him, if possible. Where his abilities are such that the employers do not like to let him go, the other employees sooner or later will force them to dismiss him. Furthermore, the paranoid individual will throw up his job on his own accord where there seems no adequate reason for the step.

It is interesting to consider the reasons for the unemployment in our cases. The patient was asked to state his reason for leaving and then the employer, wherever possible, was seen and his statement was taken. While these data have not yet been completely analyzed, the following points have been made. It seems that with the paranoid individuals the reasons stated by the patient are identical with those of the employer forty-four times out of one hundred and thirty-four cases, or 33 per cent. In the cases grouped under the heading inadequate the patient's and employer's accounts agree twenty-nine times out of ninety-five cases or 31 per cent. In the emotionally unstable group the patient's and employer's reasons are the same eighteen times out of forty-nine, or 37 per cent—a percentage slightly higher than in the previous groups.

Our list of cases does not include any very young people. The ages run from twenty-five to fifty-five and show the largest number in the years between thirty-six and forty-five, as might be expected.

An analysis of the months employed per case shows the following interesting figures: The emotionally unstable group averages fifty months to each job; the inadequate group, twenty-four and seven-tenths months to each job; and the paranoid, twenty and six-tenths months to each job.

The only conclusions that we may allow ourselves at present on the basis of this material are as follows:

I. There are individuals in the community who for a variety of reasons are not able to regulate their conduct on the basis of experience. One of the difficulties that such individuals get into is unemployment. The results of their unemployment bring hardships on themselves and on their dependents.

II. While some of these individuals show defects of such a severe nature that they may be regarded as hopeless and, therefore, can be segregated, there are others in whom the deviation from the normal is not sufficient to make them incapable of supporting themselves at all times and it is unwise to segregate them and prohibitively expensive.

III. From our analysis it appears that there are two types of individuals that experience these difficulties. One type, which is grouped under the headings of inadequate and paranoid, is afflicted with certain characteristics of personality which are not amenable to treatment. To maintain these people in the community it is necessary to modify the environment so far as possible in order to prevent, in the first place, the calling out of their peculiar reactions and, furthermore, to prevent their suffering the results of their acts; in other words, to keep a man "on the job" in spite of his personal unpopularity or inadequacy. The other type, grouped under the heading of emotionally unstable, suffers from the results of temperament. These individuals are subject to variations of temperament and the treatment of their unemployment must be guided by a knowledge of their tendencies so that environment on the one hand can be suitably influenced or chosen for them, and that the individuals themselves may be trained to counteract their impulses to some extent.

THE INSANE IN A COUNTY POOR FARM

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IT would be difficult to find, in all this wide land, a county more prosperous, more typically American or pleasanter to live in than Grayson County. This county contains few cities—the most populous has only 10,000 people—but a large rural population is supported in comfort by the fertile soil. All but two per cent of the population are native-born and there is a much smaller proportion of negroes than in the state as a whole. Most of the wealth produced by the abundant crops of cotton, corn and cane is reinvested in the county so that today its taxable property is assessed at more than $45,000,000.

Four miles west of the county seat is the Poor Farm. As you enter the grounds you come first to a two-story brick building, recently constructed at a cost of $20,000. In it live the superintendent and those inmates who are fortunate enough to be infirm in body but not in mind. Furniture and equipment are rather scanty but there is enough to meet nearly all the simple needs of those who must depend upon the county's charity. Scattered around the main building are small, wooden structures, simple and cheap in construction and not in very good repair, but open to the yard by day and cheerfully lighted by night. For the most part they are comfortable homes for the old people, the paralytics, the feeble-minded and the epileptics who live in them. This county poor farm is an unsuitable place, as all almshouses are, for the care of the feeble-minded and the epileptic but, awaiting the time when the state makes provision for them, they are at least comfortably housed and protected from most of the dangers to which they would be exposed in the world outside. The nature of these afflictions seems to be more understandable to the keepers of poor farms generally than does that of insanity and, fortunately for the feeble-minded and the epileptic, cruel traditions have not come out of the past to influence their care. Such provisions are a credit to the humanity of the county. You will find few poor farms in any state very much better than this and you will find a great many that are not nearly as good.

But what of the insane, who in this great state are kept in almshouses through failure to provide the necessary accommodations in state institutions? Back from the main building, apart from the little cottages and standing grimly alone, you will see what Grayson County has provided for them. When you first see the one-story brick building, with a high, sharp-pointed, rusty, iron fence on either side of it, you are reminded of a tomb. It is a tomb, but not for the quiet dead. This tomb is for the living whose brains can still know grief and despair and can still receive impressions from suffering bodies. Coming nearer to it, you are struck by the appearance of neglect about the place, contrasting strongly with the neatness of the newer buildings. This rather picturesque neglect outside is typical of the tragic neglect of human beings which you will see within the old brick walls. When you open the door and enter the building the first impression of a tomb returns for it is chilly—coming out of the warm October sun—and until your eyes become accustomed to the shadows you cannot quite distinguish what Grayson County has hidden here. As the outlines shape themselves distinctly you see that there is a clear space running around three sides of the one large room which forms the entire interior of the building. In the center and across the rear end of this room are fourteen iron cages, four extending across the rear end and ten, back to back, down the center. They are made of iron bars, the backs and adjoining sides being of sheet metal. Near the top of each solid side are rows of holes about an inch in diameter. Their purpose is ventilation but they serve also to destroy what poor privacy these cages might otherwise possess. Each cage contains an iron prison cot or two swinging from the wall while a few have rickety beds upon the floor.

In these cages which are too far from the windows in the brick walls for the sunlight to enter except during the short period each day when it shines directly opposite them, abandoned to filth and unbelievable misery, lie the insane poor of this pleasant, fertile, prosperous, American county. Color, age and sex have no significance in this place. All of those distinctions which elsewhere govern the lives of human beings are merged in common degradation here. Men and women, black and white, old and young, share its horrors just alike. They are insane and, with the dreadful conception of insanity which here prevails, that fact alone wipes out every consideration and every obligation except that of keeping, with food and shelter, the spark of life alight. When at dusk the shadows deepen, the creatures in this place of wretchedness cower closer in the corners of their cages, for there are no cheerful lights here as in the other buildings, and when the darkness blots out everything, only the moans and curses of your fellow-beings in distress remind you that it is not really a tomb. The outside door is locked at night. There is no watchman to make rounds and see if there are bodily wants to be attended to. If sudden illness should come at night no welcome lantern would throw its light across the grass and if the gentle touch of death should end the sufferings of one of these poor creatures, the event would be known only by finding a still form in one of the iron cots at daybreak.

Each morning brings to the men and women here light and food —as it does to the cattle in the sheds—but it does not bring to them the slightest hope of intelligent care nor, to most of them, even the narrow liberty of the iron-fenced yard. One attendant, a cheerful young man, is employed by the county to look after the forty-odd inmates who, at the least, comprise the poor farm population. He used to be a trolley-car conductor but now he receives forty dollars a month for attending to the inmates, male and female, who cannot attend to themselves. He brings back the feeble-minded when they wander off, he finds the epileptics when they fall in their attacks and he sees that all are fed. He is called the "yard man"; his duties are those of a herdsman for human beings. His predecessor, a man about sixty years of age, is serving a term in the state penitentiary for an attack upon a little girl who was an inmate of this poor farm. At his trial it was brought out that he had served a previous term in another state for a similar offense. Had he been entrusted with the custody of the county's funds instead of its helpless wards his record would doubtless have been carefully scrutinized *before* his employment.

The present "yard man" has not the slightest knowledge of any other kind of treatment for the insane nor has he had the slightest experience in practical nursing or in caring for the mentally or physically helpless. He has been employed here about a year. He found the insane in these cages and he knows of no other way of keeping them. All but three or four remain in their cages all day, crouching on the stone floor instead of upon the green grass outside. A feeble white woman in bed, wasted and pale, who apparently has but a few months to live, was pointed out in one of the cages and the "yard man" was asked if she would run away if she were permitted to have her bed outside. He admitted that it was not likely but said that she was very weak and would fall out of bed. He was asked if it would be worse to fall out of bed on the soft grass or on the wooden floor of the main building than on the stone floor of her cage, but these matters were far outside his experience or his interests and he had no reply to make. How much more knowledge and experience would have been demanded of this young man if Grayson County had seen fit to maintain a menagerie! No one would think of entrusting the animals to a man so wholly inexperienced in their care. This young man might be employed as an assistant but he would not be placed in charge of an animal house full of valuable specimens.

Do not make the mistake of thinking that the wretched people who are confined in these cages were selected from a much larger number of insane inmates of the Poor Farm on account of exceptional intractability or because their brains have been so dulled that they are no longer conscious of their surroundings. It is not true but, nevertheless, it might be thought by the misinformed that among a hundred insane patients a dozen might be found so profoundly reduced in all their mental faculties that such a place could make no impression whatever upon them or so uncontrollable that iron bars were needed to safeguard their attendants or their fellow-patients. These people are not a few closely imprisoned for such reasons; they constitute all the avowedly insane who are housed in the Grayson County Poor Farm. They include persons as fully appreciative as you or I of the horrors of their surroundings and of their personal degradation. In one cage is a man who has delusions which make it unsafe for him to have his liberty in the community. He has not been allowed outside his cage, not for a single hour, in three years.

This place was built twenty years ago. Perhaps the brain which planned it is now dust; nevertheless, its ignorant conception of the nature of mental disease still determines the kind of care which the county gives to the most unfortunate of all its helpless sick. Perhaps, too, the hands which laid these bricks and forged these iron bars are now dead; nevertheless, they still stretch out of the past and clutch the living in their cruel grasp. The conception of mental disease which gave to Grayson County this dreadful place did not even reflect the enlightment of its own period. Eighty years earlier, Esquirol had stirred the pity of France by a recital of miseries no worse than those which you will see in this county today. Many years before this place existed, Conolly had aroused public opinion in England to such an extent that it was possible for cages such as these to exist in only the darkest corners of the land. Thirty years before this place was built, Dorothea Dix was showing the inhumanity of almshouse care of the insane in this country and members of our legislatures were profoundly stirred by her descriptions of conditions less abhorrent than those which exist in Grayson County today. Great reforms in the care of the insane have extended over the entire country since these walls were built but they have left this place untouched and it stands today, not a pathetic relic of the ignorance and inhumanity of another age and of an almost forgotten conception of diseases of the mind, but an actual, living reality reproducing, without a detail lacking, conditions which were described in pitying terms by the writers of four centuries ago. Standing in the doorway of this place you can see evidences of the material achievements of the twentieth century; taking a single step inside you can see the suffering which the superstition, fear and ignorance of the sixteenth century imposed upon its insane.

Perhaps, in another year, the governor and the legislature of this great and wealthy state will listen to the appeals for its insane poor which have gone up from hundreds of humane people. Perhaps, next year, the governor and the legislature will find time to read the report of the condition of the insane and feeble-minded which a professor in the state university made after he had personally visited the jails and the poor farms in which these unfortunate people were waiting for a summons to state institutions which never came. Perhaps the resolutions passed by the State Medical Society and by the Association of County Judges and County Commissioners—bodies composed of men who day in and day out see the miseries of the uncared-for insane—will next year receive the attention of the governor and the legislature. Then, perhaps, when the public officials who are the guardians of the honor of the state become aware of the stain which they have permitted to rest upon it, a new institution and additional wards at the three existing state institutions for the insane will be provided so that all can be cared for instead of a few.

When that is done word will go out to the counties that at last the state is ready to do its full duty and that the insane need no longer drag out hopeless lives in the cages of county poor farms or in the cells of county jails. The clean winds will then sweep through empty cages at the Grayson County Poor Farm and dry leaves will dance in the corners where the mothers and daughters of Grayson County men now cower in filth and fear and misery. If the old brick building is permitted to stand at all it will serve then only to start the tears of those who see it and remember the long years during which a great and prosperous state was content to permit sick human beings to remain in such a place. If these things are accomplished, the insane of the next generation will never know what it is to be caged like wild beasts, for throughout the state all those who suffer from mental diseases—rich and poor alike—will be treated in hospitals just as those with other diseases are treated. Many will recover, while kindly attention, skilfully directed occupation and cheerful, comfortable surroundings will ameliorate the lot of those for whom recovery is impossible.

But what of the trembling creatures who will come out of the darkness and filth of these cells and cages and of places like them into the light of the state hospitals? Is it still possible to make reparation for the neglect and cruelty which they have suffered? Can a man or a woman be caged for years like a captive animal and still react to gentleness and kindness? For some, the progress of their disease alone, without the aid of man's inhumanity, has made recovery impossible, but there are others in the cages at the Grayson County Poor Farm who would react to the new environment and gain a fair measure of happiness and contentment. It is not impossible that some would recover or improve sufficiently to return to their homes. Such a happy transformation in care would not be an untried experiment. State after state has wisely and humanely made provisions for all its insane and passed laws making it illegal to deny proper care and treatment to any insane person. In 1869, more than twenty-five years before the place in Grayson County was built, a great state hospital was opened for the sole purpose of caring for the "chronic" insane. There are those still living who saw the pathetic company which came out of the dark cells of the almshouses into the pleasant wards of this institution. They came—as the insane poor of this state would come today—in filth and rags, some of them bearing on their wrists and ankles the shameful marks of handcuffs and leg-irons. Out of the hundreds who within a few months passed from utter neglect into humane and skilful care, some recovered and went back to homes in which they had been almost forgotten. Others, under patient instruction and kindly encouragement, took up again household and farm tasks which they had laid down long ago and lived many years of contentment in a new world where safeguards were thrown about them and their damaged minds understood.

It is not enough to appropriate the money needed to provide a number of new beds in the state institutions sufficient to accommodate those who now lie in the jails and poor farms and to amend the cruel commitment laws of the state. The causes of mental disease are in constant operation and, during the coming year, not less than 1,000 new patients will require treatment. Many hundreds of others will still be kept at home, to the serious detriment of themselves, their families and the communities, through survival of the dread of taking the steps for admission which the existing commitment laws require. A strong, wise and humane policy of dealing with insanity must, therefore, be adopted by the state. Every insane person in the state must continuously receive the protection of its powerful arm and this protection must reach to the most remote corners.

Perhaps the time has not yet come when the governor and the legislature will turn their attention to this question—the one which more deeply affects the honor of the state than any which is before them. Perhaps still another legislature will temporize with this solemn obligation. If such be the case, the issue should not be obscured. The governor and the legislature by their failure to provide the accommodations needed in the state hospitals and to secure the enactment of the laws necessary to reform the cruel process of commitment will say, in effect, to the citizens of the state and to the citizens of other states who, attracted by its opportunities, are considering making their home there: "Our attention has been called repeatedly to the sufferings of the insane in the poor farms of the state. We have had brought to our notice the hardships which our commitment laws impose upon men and women who have done no wrong but have developed diseases of the brain. We have been shown their appalling condition in the county jails where, during the early period of their illness when the chances for recovery with proper treatment are greatest, they are locked up in cells with criminals and denied skilled care, nursing and even physical protection. We are aware that if our people are fortunate enough to be able to pay the cost of treatment in a private sanitarium, it is not necessary to prefer the charge of insanity against them, arrest them, take them to jail or try them. We realize that such a distinction in the legal procedure is undemocratic and is abhorrent to the sense of justice of our people. We know that fear of the harsh treatment which the insane receive and of the criminal procedure which must be employed to bring them under the care of the state institutions keeps hundreds in their homes—dissipating their chances of recovery and imposing a heavy burden upon their families. We know that there is a strong sentiment in the state for reform in these matters. *We propose, nevertheless, to do nothing about it.*"

This state is calling for settlers. The advantages of its rich soil, its great undeveloped resources and its extensive transportation facilities are being set forth in circulars and advertisements which are sent broadcast over the country. Chambers of commerce in Grayson County and in other counties of the state advertise the advantages to young married couples of settling in those places. There should be added to such circulars these words: "However, we must warn you that this state does not undertake to provide treatment for her insane. If the young wife by your side has a baby and during her confinement the delicate mechanism of her brain is injured and she becomes insane, we will have her charged with insanity, send the sheriff to arrest her and we will lock her up in jail. If there is no room for her in a state hospital we will, after her conviction, put her in an iron cage in the county poor farm and if no vacancy occurs in the state institution we will keep her there, without care or nursing. If, while waiting for a vacancy, her condition becomes 'chronic' we will keep her in this cage until she dies, for preference for admissions has to be given 'acute' cases. If, on the other hand, you and she grow old together and by some mischance the changes which accompany advancing age affect the brain of either of you, instead of any other organ, so that insanity develops, we will arrest you, lock you up in jail until you are convicted and keep you there or in a cage at the county poor farm until you die. Other measures have been proposed in this state but, after mature deliberation and with full knowledge, the governor and the legislature have decided to continue the existing policy."

No one can believe that the present humane governor and the legislature of this great state will take any such position as this. They hold their offices, after all, only to do the bidding of the people and there can be no doubt in the mind of any one who is familiar with the history of this enlightened state that, once the real truth about the neglect of the insane is realized and the simple remedy made known, the hearts of the people will be touched and their wishes in the matter will be communicated to the governor and to the legislature in no uncertain terms.

For that governor who lends his powerful aid to the liberation of the insane from the county jails and poor farms of his state and to the enactment of laws which will forever make it impossible to keep the insane poor in such shameful confinement again, there is reserved a place in the esteem of his fellow-men which the greatest would have been proud to fill. For the members of that legislature which makes the provisions required and enacts such laws, there is the reward of knowing that no men who have sat in the state capitol ever performed a duty more creditable to their hearts and to their manhood or to the chivalry of the great American commonwealth which it was their honor to serve.

THE GROWTH OF PROVISION FOR THE FEEBLE-MINDED IN THE UNITED STATES

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THE first recorded attempt to educate an idiot was made about the year 1800 by Itard, the celebrated physician-in-chief to the National Institution for the Deaf and Dumb at Paris. His subject was a boy found wild in a forest in the centre of France and known as the "savage of Aveyron." "This boy could not speak any human tongue, and was devoid of all understanding and knowledge." Believing him to be a savage, for five years Itard endeavored with great skill and perseverance to develop at the same time the intelligence of his pupil and the theories of the materialistic school of philosophy. Itard finally became convinced that this boy was an idiot and abandoned the attempt to educate him.

In 1818 and for a few years afterward, several idiotic children were received and given instruction at the American Asylum for the Deaf and Dumb at Hartford, and a fair degree of improvement in their physical condition, habits, and speech was obtained.

Ten years later Dr. Ferret, physician at the Bicêtre in Paris, attempted to teach a few of the more intelligent idiots who were confined in this hospital to read and write and to train them to habits of cleanliness and order. In 1831 Dr. Fabret attempted the same work at the Salpetrière; and in 1833 Dr. Voisin opened his private school for idiots in Paris. None of these attempts was successful enough to insure its continuance.

In 1837 Dr. E. Seguin, a pupil of Itard and Esquirol, began the private instruction of idiots at his own expense. In 1842 he was made the instructor of the school at the Bicêtre which had been reopened by Dr. Voisin in 1839. Dr. Seguin remained at the Bicêtre only one year, retiring to continue the work in his private school in the Hospice des Incurables. After seven years of patient work and experiments and the publication of two or three pamphlets describing the work, a committee from the Academy of Sciences at Paris in 1844 examined critically and thoroughly his methods of training and educating idiot children and reported to the Academy, giving them the highest commendation and declaring that, up to the time he commenced his labors in 1837, idiots could not be educated by any means previously known or practised, but that he had solved the problem. His work thus approved by the highest authority, Dr. Seguin continued his private school in Paris until the Revolution in 1848. Then he came to America, where he was instrumental in establishing schools for idiots in various States.

In 1846 Dr. Seguin published his classical and comprehensive "Treatise on Idiocy," which was crowned by the Academy and has continued up to the present time to be the standard text-book for all interested in the education of idiots. His elaborate system of teaching and training idiots consisted in the careful "adaptation of the principles of physiology, through physiological means and instruments, to the development of the dynamic, perceptive, reflective, and spontaneous functions of youth." This physiological education of defective brains, as a result of systematic training of the special senses, the functions and the muscular system, was looked upon as a visionary theory, but it has been verified and confirmed by modern experiments and researches in physiological psychology. Dr. Seguin's school was visited by scientists and philanthropists from nearly every part of the civilized world and, his methods bearing the test of experience, schools were soon established in other countries, based upon these methods.

In 1842 Dr. Guggenbuhl established a school upon the slope of the Abendenberg in Switzerland, for the care and training of cretins, so many of whom are found in the valleys of the Alps. This school was so successful in its results that it attracted much attention throughout Europe. At Berlin, in 1842, a school for the instruction of idiots was opened by Dr. Saegert. In England the publication of the results of the work of Drs. Seguin, Guggenbuhl, and Saegert led, through the efforts of Drs. Connolly and Reed, to the establishment of a private school at Bath in 1846, and later to the finely appointed establishments at Colchester and Earlswood.

The published description of the methods and results of these European schools attracted much interest and attention in America. In this country the necessity and humanity of caring for and scientifically treating the insane, the deaf and dumb, and the blind had become the policy of many of our most progressive States. The helpless, neglected, and homeless idiots were cared for, as a rule, in jails and poorhouses. A few who had been received at the special schools for the deaf and dumb, and the blind showed considerable improvement after a period of training. Other cases who were especially troublesome had been sent to the insane hospitals, where it was shown that the habits and behavior of this class could be changed very much for the better. In their reports for 1845 Drs. Woodward and Brigham, superintendents of the State Insane Hospitals in Massachusetts and New York respectively, urged the necessity of making public provision for the education of idiots in those States. On the 13th of January, 1846, Dr. F. P. Backus, a member of the New York Senate, made the first step toward any legislative action in this country in behalf of idiots by moving that the portion of the last State census relating to idiots be referred to the committee on medical societies, of which he was chairman. On the following day he made an able report, giving the number of idiots in the State, a brief history of the European schools, with a description of their methods and results, and showed conclusively that schools for idiots were a want of the age. On the 25th of March following he introduced a bill providing for the establishment of an asylum for idiots. The bill passed the Senate, but was defeated in the Assembly.

In Massachusetts, on the 23d of January in the same year, 1846, Judge Byington, a member of the House of Representatives, moved an order providing for the appointment of a committee to "consider the expediency of appointing commissioners to inquire into the condition of idiots in the Commonwealth, to ascertain their number, and whether anything can be done for their relief." This order was passed and, as a result, a board of three commissioners was appointed, of which Dr. S. G. Howe was chairman. This commission made a report in part in 1847, which included a letter from Hon. G. S. Sumner describing in glowing terms the methods and results of the school of Dr. Seguin in Paris. In March, 1848, the commission made a complete and exhaustive report, with statistical tables and minute details, and recommended the opening of an experimental school. This report was widely circulated throughout America and Europe, and it furnishes to-day the basis of cyclopedic literature on this topic.

By a resolve passed on the 8th of May, 1848, the legislature appropriated $2,500 annually for the purpose of establishing an experimental school, with the proviso that ten indigent idiots from different parts of the State should be selected for instruction. This act founded the first State institution in America. The first pupil was received on the 1st of October, 1848. The direction of the school was undertaken by Dr. Howe and for several years was carried on in connection with the Perkins Institution for the Blind, of which he was the director. Mr. J. B. Richards, an able instructor, was engaged as teacher and went to Europe to study the methods of the foreign schools. The school was considered so successful that at the end of three years the legislature doubled the annual appropriation and by incorporation converted the experimental school into a permanent one under the name of "The Massachusetts School for Idiotic and Feeble-minded Youth."

Two months after the legislature had authorized the establishment of this institution, a private school was opened at Barre, Massachusetts, by Dr. H. B. Wilbur, the first pupil being received in July, 1848. In the modest announcement of the project Dr. Wilbur said, "This institution is designed for the education and management of all children who by reason of mental infirmity are not fit subjects for ordinary school instruction." The school was organized on the family plan. The pupils all sat at the same table with the principal, and were constantly under the supervision of some member of the family in the hours of recreation and rest as well as of training.

In the State of New York the legislative attempt which was defeated in 1846 was renewed in 1847, when the bill passed the Senate, to be again defeated in the Assembly. The necessity for action was urged in the governors' annual messages in 1848, 1850, and 1851. Finally, in July, 1851, an act was passed appropriating $6,000 annually for two years for the purpose of maintaining an experimental school for idiots. A suitable building near Albany was rented and the school opened in October, 1851. The trustees selected for superintendent Dr. H. B. Wilbur, who had so successfully organized and conducted for more than three years the private school at Barre. In the first annual report of the trustees, published in 1851, the aims and purposes of the proposed school were summed up as follows:—

> "We do not propose to create or supply faculties absolutely wanting; nor to bring all grades of idiocy to the same standard of development or discipline; nor to make them all capable of sustaining creditably all the relations of a social and moral life; but rather to give to dormant faculties the greatest possible

development, and to apply these awakened faculties to a useful purpose under the control of an aroused and disciplined will. At the base of all our efforts lies the principle that, as a rule, none of the faculties are absolutely wanting, but dormant, undeveloped and imperfect."

This school attracted much attention from educators and others and was frequently and critically inspected by the members of the legislature and other State officials. On the 11th of April, 1853, the legislature authorized the erection of new buildings. The citizens of Syracuse donated the land, and the corner-stone of the first structure in this country built expressly for the purpose of caring for and training idiots was laid September 8, 1854. The school at Syracuse continued under Dr. Wilbur's direction until his death in 1883. In this school the physiological method of education was most thoroughly and scientifically carried out and a high degree of success attained.

Pennsylvania was the third State to take up the work. In the winter of 1852 a private school for idiots was opened in Germantown by Mr. J. B. Richards, the first teacher in the school at South Boston. This school was incorporated April 7, 1853, as the Pennsylvania Training School for Idiotic and Feeble-minded Children. The first money received for its support was raised by private subscription. The State contributed an equal sum. In 1855 the site at Elwyn was secured and the foundations laid for the present magnificent institutional village with more than a thousand inmates.

The Ohio Institution at Columbus was established April 17, 1857, and pupils were received the same year. The State of Ohio has from the beginning provided for her feeble-minded children on a liberal and generous scale. The institution at Columbus, with its substantial buildings and splendid equipment, its admirably conducted school and industrial departments, has been made one of the best institutions in the world devoted to the care and training of this special class.

In Connecticut, in 1855, a State commission was appointed to investigate the conditions of the idiotic population and to consider the advisability of making suitable provision for the education of this class. The report of this commission resulted in the establishment of the Connecticut School for Imbeciles at Lakeville in 1858, under the superintendency of Dr. H. M. Knight. This school, although aided by the State, was largely supported by private benevolence and payments from private pupils. In 1913 the property was taken over by the State.

The Kentucky institution at Frankfort was opened in 1860. For many years the State had granted an allowance of $50 per annum to each needy family afflicted with the burden of a feeble-minded child, a practice which is still continued. In Illinois an experimental school for idiots and feeble-minded children was opened in 1865 as an offshoot of the school for deaf-mutes at Jacksonville. In the course of a few years this school obtained a separate organization, and new institution buildings were constructed at Lincoln and occupied in 1873.

Thus, up to 1874, twenty-six years after this work was begun in America, public or semi-public institutions for the feeble-minded had been established in seven States. These institutions then had under training a total of 1,041 pupils. There were also two private institutions in Massachusetts at Barre and Fayville, with a total of sixty-nine inmates.

The early history of these pioneer State institutions was in many respects very similar. They were practically all begun as tentative experiments in the face of great public distrust and doubt as to the value of the results to be obtained. In Connecticut the commissioners found a "settled conviction of a large majority of the citizens of the Commonwealth that idiots were a class so utterly helpless that it was a waste of time even to collect any statistics regarding them." Very little was known of the causes, frequency, nature, or varieties of idiocy, or of the principles and methods to be employed in successfully training and caring for this class of persons. The annual reports of the early superintendents, Howe, Wilbur, Brown, Parrish, and Knight, exhaustively considered the subject in all its phases, and graphically presented to legislators and the public convincing and unanswerable reasons as to the feasibility and necessity of granting to feeble-minded children the same opportunities for education according to their ability that were given to their more fortunate brothers and sisters in the public schools.

All these schools were organized as strictly educational institutions. In one of his earlier reports Dr. Howe said, "It is a link in the chain of common schools—the last indeed, but still a necessary link in order to embrace all the children in the State." Again he said, "This institution, being intended for a school, should not be converted into an asylum for incurables." Dr. Wilbur in his seventh annual report said, "A new institution in a new field of education has the double mission of securing the best possible results, and at the same time of making that impression upon the public mind as will give faith in its object." With the limited capacity of these schools, it seemed best to advocate the policy of admitting only the higher-grade cases, where the resulting improvement and development could be compared with that of normal children.

It was hoped and believed that a large proportion of this higher-grade or "improvable" class of defectives could be so developed and educated that they would be capable of supporting themselves and of creditably maintaining an independent position in the community. It was maintained that the State should not assume their permanent care but that they should be returned to their homes after they had been trained and educated. It was the belief of the managers that only a relatively small number of inmates could be successfully cared for in one institution. It was deemed unwise to congregate a large number of persons suffering with any common infirmity.

Nearly all these early public institutions were opened at or near the capitals of their various States, in order that the members of the legislature might closely watch their operations and personally see their need and the results of the instruction and training of the children. No institution has ever been abandoned or given up after having been established. In all of them the applications for admission have always been far in excess of their capacity.

In the course of a few years we find the superintendents, in the annual reports of these institutions, regretting that it was not expedient to return to the community a certain number of the cases who had received all the instruction the school had to offer. When the limit of age was reached, it was a serious problem to decide what should be done with the trained boy or girl. It was found that only a small proportion, even of these selected pupils, could be so developed and improved that they could go out into the world and support themselves independently. A larger number, as a result of the school discipline and training, could be taken home, where they would become comparatively harmless and unobjectionable members of the family, capable, under the loving and watchful care of their friends, of earning by their labor as much as it cost to maintain them. In many other cases, however, the guardians or parents of these children were unwilling to remove them from the institutions and begged that they might be allowed to remain where they could be made happy and kept from harm. Many were homeless and friendless and, if sent away from the school, could be transferred only to almshouses, where they would become depraved and demoralized by association with adult paupers and vagrants of both sexes. It was soon found neither wise nor humane to turn these boys and girls out to shift for themselves. The placing out of these feeble-minded persons, except under the most careful supervision, proved unsatisfactory. Even those who had suitable homes and relatives able and willing to become responsible for them were, by the death of these relatives, thrown on their own resources and drifted into pauperism and crime. It gradually became evident that a certain number of even these higher-grade cases needed lifelong care and supervision, and that there was no suitable provision for this permanent custody outside special institutions.

Once it was admitted that our full duty toward this class must include the retention and guardianship of some of those who had been trained in the schools, the wisdom and necessity of still further broadening the work became apparent. It was found that more than one-half of the applications for admission, and those by far the most insistent, were in behalf of the "unimprovables," as Dr. Howe described them. This lower class of idiots, many of them with untidy, disgusting, and disagreeable habits, feeble physically, perhaps deformed and misshapen, often partially paralyzed or subject to epilepsy, cannot be given suitable care at home. There is no greater burden possible in a home or a neighborhood. It has been well said that by institutional care, for every five idiots cared for we restore four productive persons to the community; for, whereas at home the care of each of these children practically requires the time and energies of one person, in an institution the proportion of paid employees is not over one to each five inmates. The home care of a low-grade idiot consumes so much of the working capacity of the wage-earner of the household that often the entire family becomes pauperized. Humanity and public policy demand that families should be relieved of the burden of helpless idiots. From the nature of their infirmities it is evident that the care of this class must last as long as they live. As nearly every low-grade idiot eventually becomes a public burden, it is better to assume this care when they are young and susceptible of a certain amount of training than to receive them later on, undisciplined, helpless, destructive, adult idiots.

The brighter classes of the feeble-minded, with their weak will power and deficient judgment, are easily influenced for evil and are prone to become vagrants, drunkards, and thieves. The modern scientific study of the dependent and delinquent classes as a whole has demonstrated that a large proportion of our criminals, inebriates, and prostitutes are really congenital defectives, who have been allowed to grow up without any attempt being made to improve or discipline them. Society suffers the penalty of this neglect in an increase of pauperism and vice and finally, at greatly increased cost, is compelled to take charge of adult idiots in almshouses and hospitals and of mentally defective criminals in jails and prisons, generally during the remainder of their natural lives. As a matter of mere economy, it is now believed that it is better and cheaper for the community to assume the permanent custody of such persons before they have carried out a long career of expensive crime.

The tendency to lead dissolute lives is especially noticeable in the females. A feeble-minded girl is exposed as no other girl in the world is exposed. She has not sense enough to protect herself from the perils to which women are subjected. Often sunny in disposition and physically attractive, they either marry and bring forth in geometrical ratio a new generation of defectives and dependents, or become irresponsible sources of corruption and debauchery in the communities where they live. There is hardly a poorhouse in this land where there are not two or more feeble-minded women with from one to four illegitimate children each. There is every reason in morality, humanity, and public policy that these feeble-minded women should be under permanent and watchful guardianship, especially during the child-bearing age. A feeble-minded girl of the higher grade was accepted as a pupil at the Massachusetts School for the Feeble-minded when she was fifteen years of age. At the last moment the mother refused to send her to the school, as she "could not bear the disgrace of publicly admitting that she had a feeble-minded child." Ten years later the girl was committed to the institution by the court, after she had given birth to six illegitimate children, four of whom were still living and all feeble-minded. The city where she lived had supported her at the almshouse for a period of several months at each confinement, had been compelled to assume the burden of the life-long support of her progeny, and finally decided to place her in permanent custody. Her mother had died broken-hearted several years earlier.

The recognition of the characteristics, limitations, and needs of these various classes and the results of experience in their training, care, and guardianship have materially modified and broadened the scope and policy of our American institutions for the feeble-minded. To-day the advantages of these public institutions are not confined to the brighter cases needing school training especially, but have been gradually extended to a greater or less extent in the different States to all the grades and types of idiocy. With all these various classes pleading for admission, it is not strange that many of these institutions have become far more extensive than their founders dreamed of or hoped for. Successive legislatures have been ready to enlarge existing institutions when they would not grant appropriations for establishing new ones. The evil effects feared from congregating a large number of this class have not been realized, or have been minimized by careful classification and separation of the different groups. In fact, we find we must congregate them to get the best results. In order to have companionship, that most necessary thing in the education of all children, we must have large numbers from which to make up our small classes of those who are of an equal degree of intelligence.

The essentially educational character of the earlier institutions has been maintained but the relations of the different parts of instruction are now better understood. The strictly school exercises, in the early days the most prominent feature, still perform their necessary and proper functions but now in harmony with but subsidiary to the more practical objects of the institution. Education, as applied to the development of these feeble-minded children, is now understood in its broadest sense, not as mere intellectual training but as uniform cultivation of the whole being, physically, mentally, and morally. The end and aim of all our teaching and training is to make the child helpful to himself and useful to others.

Sir W. Mitchell says, "It is of very little use to be able to read words of two or three letters, but it is of great use to teach an imbecile to put his clothes on and take them off, to be of cleanly habits, to eat tidily, to control his temper, to avoid hurting others, to act with politeness, to be truthful, to know something of numbers, to go with messages, to tell the hour by the clock, to know something of the value of coins, and a hundred other such things."

As now organized, our American institutions for the feeble-minded are broadly divided into two departments, the school or educational, and the custodial. In the school department the children are instructed in the ordinary branches of the common schools. As compared with the education of normal children, the difference is one of degree and not of kind. The progressive games and occupations of the kindergarten, object teaching, educational gymnastics, manual training, and the other graphic and attractive methods now so successfully applied in the education of normal children are especially adapted to the training of the feeble-minded. These principles of physiological training of the senses and faculties, of exercising and developing the power of attention, perception, and judgment by teaching the qualities and properties of concrete objects instead of expecting the child to absorb ready-made knowledge from books, of progressively training the eye, the hand, and the ear—these were the methods formulated by Seguin and elaborated and applied by Richards, Wilbur, and Howe years before the era of the kindergarten and the dawn of the new education. It would be difficult properly to estimate the influence of these original and successful methods of instructing the feeble-minded in suggesting and shaping the radical changes that have been made in the methods of modern primary teaching of normal children. With feeble-minded children the instruction must begin on a lower plane; the progress is slower and the pupil cannot be carried so far. In a school with several hundred children a satisfactory gradation of classes can be made if the small proportion of children showing irregular and unusual deficiencies is assigned to special classes for instruction through individual methods.

Most of the pupils of this grade learn to read and write, to know something of numbers, and acquire a more or less practical knowledge of common affairs. Careful attention is paid to the inculcation of the simple principles of morality, the teaching of correct habits and behavior, and the observance of the ordinary amenities of life.

The most prominent feature of our educational training to-day is the attention paid to instruction in industrial occupations and manual labor. In this "education by doing" we not only have a very valuable means of exercising and developing the dormant faculties and defective bodies of our pupils, but at the same time we are training them to become capable and useful men and women. The recent reports of these institutions show in detail the large variety and amount of work done by these children. Carpentering, painting, printing, brick-making, stock-raising, gardening, farming, domestic work, the manufacture of clothing, boots and shoes, brooms and brushes, and other industries are now successfully and profitably carried on by the pupils in these schools in connection with the strictly mental training.

Each year a certain number of persons of this class go out from such institutions and lead useful, harmless lives. Some of the institutions where only the brightest class of imbeciles are received and where the system of industrial training has been very carefully carried out, report that from twenty to thirty per cent of the pupils are discharged as absolutely self-supporting. In other institutions, where the lower-grade cases are received, the percentage of cases so discharged is considerably less. It is safe to say that not over ten to fifteen per cent of our inmates can be made self-supporting in the sense of going out into the community, securing and retaining a situation, and prudently spending their earnings. With all our training we cannot give our pupils that indispensable something known as good, plain "common sense." The amount and value of their labor depend upon the amount of oversight and supervision practicable; but it is safe to say that over fifty per cent of the adults of the higher grade who have been under training from childhood are capable, under intelligent supervision, of doing a sufficient amount of work to pay for the actual cost of their support, whether in an institution or at home.

The custodial department includes the lower grades of idiots and the epileptics. Some of these children are as helpless as infants, incapable of standing alone, of dressing or feeding themselves, or of making their wants known. Other cases are excitable and noisy, with markedly destructive tendencies. The chief indication with these lower-grade cases is to see that their wants are attended to, and to make them comfortable and happy as long as they live; but even with these cases much improvement is possible through teaching them to wait on themselves, to dress and undress, to feed themselves, and by attention to personal cleanliness and habits of order and obedience. As a result of the kindly but firm discipline, the patient habit-teaching, and the well-ordered institution routine, a large proportion of these children become much less troublesome and disgusting, so much so that the burden and expense of their care and support are materially and permanently lessened.

Requiring permanent care also are the moral imbeciles and the adults of both sexes who have graduated from the school department, or are past school age, but cannot safely be trusted, either for their own good or the good of the community, where not under strict and judicious surveillance. For these classes the institution provides a home where they may lead happy, harmless, useful lives.

The daily routine work of a large institution furnishes these trained adults with abundant opportunities for doing simple manual labor, which otherwise would have to be done by paid employees. Outside of an institution it would be impossible to secure the experienced and patient supervision and direction necessary to obtain practical, remunerative results from the comparatively unskilled labor of these feeble-minded people. In the institution the boys assist the baker, the carpenter, and the engineer. They do much of the shoemaking, the tailoring, and the painting. They drive teams, build roads, and dig ditches. Nearly all of the institutions have large farms and gardens which supply enormous quantities of milk and vegetables for the consumption of the inmates. This farm and garden work is largely done by the adult male imbeciles. The females do the laundry work, make the clothing and bedding, and do a large share of all the other domestic work of these immense households. Many of these adult females, naturally kind and gentle, have the instinctive feminine love for children, and are of great assistance in caring for the feeble and crippled children in the custodial department. These simple people are much happier and better off in every respect when they know they are doing some useful and necessary work. Some of the restless persons of the delinquent type could hardly be controlled and managed if their surplus energies were not worked off by a reasonable amount of manual labor.

In the early days of public provision for the mentally defective the tendency seemed to be to enlarge the institutions symmetrically as the demands for admission increased, without much attempt to distinguish certain groups which might be cared for more advantageously in an entirely different manner. Experience has shown that there is a form of care which not only greatly improves the physical and mental condition of one group of the feeble-minded but also reduces to practically nothing the actual cost of their maintenance. I refer to so-called "colony" care. Colony care does not, of course, do away with the necessity for "institutional" care. Practically, it means that an institution may have its capacity increased many fold at almost no increase in total cost for maintenance.

In brief, the plan includes, first, a "parent" institution for young children, the bed-ridden, infirm, and strictly custodial cases. Into this parent institution should be received the new admissions for purposes of classification and preliminary training. These parent institutions are advantageously located fairly near large centers of population. The colonies, subsidiary to the parent institution, should be located in the country at distances of from twenty to fifty miles and on land suitable for cultivation. Temporary or permanent colonies may also be established on wild State lands for the purpose of clearing them and maintaining them in such condition that, from their lumber or other products, they may return to the State a maximum revenue. In these colonies are placed the men and large boys who are able or who can be taught to do the necessary work.

During the past decade this form of care has rapidly grown, so that now there is general approval of the formation of colonies for adult male feeble-minded persons in good physical condition. Such colonies, when connected with "parent" institutions, can be made self-supporting and seem to offer a most hopeful means of providing for a greatly increased number of cases at a minimum expense to the State.

Such has been the development of the care of the feeble-minded in the United States. The next step, it seems to me, in state care for mental defectives will be the development of plans for the supervised care of suitable cases, usually those who have had a period of institutional observation and training, in the communities. Many such patients can get on in their own homes, while others may be "boarded-out" in carefully selected families in rural communities, subject of course to strict supervision by officers of the parent institution. With this development the capacity of any institution would practically be limited only by the supply of suitable cases, the topography of the country, the character of the general population, and the ability of the executive, as the cost of maintenance would be reduced to the minimum and the necessity and difficulty of securing continually enlarged legislative appropriations would be eliminated.

The material growth and separate history of the older institutions and the numerous public and private schools that have been opened in this country since 1874 are too comprehensive to be considered in detail in this article. The accompanying list* contains the name, location, dates of establishment and opening, capacity, and name of the superintendent of each of the public institutions for the especial care of the feeble-minded and the epileptic (except as otherwise noted in the list) existing on January 1, 1916.

The statistical table following the list is of considerable interest, showing, as it does, the number of non-insane feeble-minded and epileptics in state institutions in each of the states, as well as the total for the United States, on June 1, 1890, January 1, 1904, January 1, 1910, and January 1, 1916.

It will be noted that there were 15,599 feeble-minded and epileptic persons under state care in the United States on January 1, 1904, an increase of 290 per cent over the corresponding figure (4,001) for June 1, 1890. At the end of the next six years they had increased to 23,358, a growth of 50 per cent, and six years later, or on January 1, 1916, there were 34,137, an increase in that period of 46 per cent. In other words, from June 1, 1890, to January 1, 1916, the number of feeble-minded and epileptic persons under state care in the United States had risen from 4,001 to 34,137 or an increase of 753 per cent.

The reports of the United States Census Bureau show that the general population of the United States increased 29 per cent from June 1, 1890, to January 1, 1904; 14 per cent in the next six years, and 10 per cent in the six years ending January 1, 1916. The increase in general population from June 1, 1890, to January 1, 1916, was 62 per cent.

To one not familiar with the facts it might seem at first sight that feeble-mindedness and epilepsy were increasing enormously in the United States in comparison with the general population. That is not the case, however, or at least these figures do not prove it to be so. What they do show is the greater proportionate amount of state care provided in recent years for a class that hitherto had been abandoned in the jails and almshouses, or had roamed the country, a menace to the community as well as to itself. Nor should this enormous increase in state care throughout the United States—753 per cent in 26 years—obscure the fact that the present state provision for this class in the country at large is far below what it should be. How great the lack is can be seen in the column headed January 1, 1916, where it is shown that 20 states have a higher ratio of provision than the United States as a whole, and that one of them—Massachusetts—is caring for nearly three times as many feeble-minded and epileptics per 100,000 population as are being cared for in the country at large. And yet Massachusetts acknowledges that it is doing but a small part of what it should do to give these defectives the care they need. As a matter of fact, this increase of 753 per cent in 26 years is really an index of the lack of appreciation on the part of former generations of the great part played by mental deficiency in dependency, crime, and delinquency.

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* The list and statistical table were prepared by the National Committee for Mental Hygiene. The Committee plans to publish similar figures every year, thus supplementing the decennial statements of the United States Census Bureau.

Among other interesting facts shown by the table is the consistent leadership of Ohio, Minnesota, and Iowa in provision for their feeble-minded and epileptics. Massachusetts, ranking seventh in 1890, rose to third place in 1904; since then it has led all of the states.

Confirming the statement made earlier in this article relative to the tendency towards larger rather than to more numerous institutions, the table shows that on June 1, 1890, there was throughout the United States an average of 250 inmates per institution; on January 1, 1904, the average had increased to 488; on January 1, 1910, to 570; while on January 1, 1916, the average population of the public institutions for mental defectives and epileptics had increased to 683 persons. The number of institutions represented in the statistical tables on each of the census dates was 16, 32, 41, and 50, respectively.

Following the statistical table is a map of the United States showing graphically the states that provide separate institutions for their feeble-minded and for their epileptics, those that care for the two classes in the same institution, and those that have as yet no special institution for either the mentally defective or the epileptic.

LIST OF PUBLIC INSTITUTIONS FOR THE FEEBLE-MINDED AND THE EPILEPTIC IN THE UNITED STATES

1916

Feeble-mined persons with tempory episodes of insanity are also to be found in practically all institutions for the insane, while in a number of states feeble-minded persons and non-insane epileptics are committed to the State hospitals as "insane", in the absence of better facilities. Both the feeble-minded and the epileptic are to be found also in county and local charitable institutions in every State. Such "provision" is not included in this list.

The capacity of each institution includes that of buildings in course of erection or provided for by legislative enactment. If the number of patients housed exceeds the rated capacity, the former is given as the capacity.

ALABAMA

No public institution for the feeble-minded or for the epileptic

ALASKA

No public institution for the feeble-minded or for the epileptic

ARIZONA

No public institution for the feeble-minded or for the epileptic

ARKANSAS

No public institution for the feeble-minded or for the epileptic. Commission to investigate needs appointed in 1915; investigation under way

CALIFORNIA

SONOMA STATE HOME, Eldridge
William J. G. Dawson, M. D., Medical Superintendent
Established and opened, 1885; for feeble-minded and epileptics; capacity, 1,345

No separate public institution for epileptics

COLORADO

STATE HOME AND TRAINING SCHOOL FOR MENTAL DEFECTIVES, Arvada (P. O., Ridge)
A. P. Busey, M. D., Superintendent
Established, 1909; opened, 1912; for feeble-minded and epileptics; capacity, 81

No separate public institution for epileptics

CONNECTICUT

CONNECTICUT COLONY FOR EPILEPTICS, Mansfield Depot
Donald L. Ross, M. D., Superintendent
Established, 1909; opened, 1913; for epileptics; capacity, 96

CONNECTICUT TRAINING SCHOOL FOR FEEBLE-MINDED, Lakeville
Charles T. La Moure, M. D., Superintendent
Established, 1857; opened as public institution, 1913; for feeble-minded; capacity, 550

DELAWARE

No public institution for the feeble-minded or for the epileptic. The State supports 13 feeble-minded at the Training School for Feeble-Minded Children, Elwyn, Pennsylvania. Commission appointed to investigate conditions, 1916

DISTRICT OF COLUMBIA

No public institution for the feeble-minded or for the epileptic. Bill for public institution pending in Congress. The District supports 45 feeble-minded at the Training School for Feeble-Minded Children, Elwyn, Pennsylvania, and maintains others in private institutions in Virginia and New Jersey

FLORIDA

No public institution for the feeble-minded or for the epileptic. Commission appointed in 1915 to investigate needs and report in spring of 1917

GEORGIA

No public institution for the feeble-minded or for the epileptic

IDAHO

IDAHO STATE SANITARIUM, Nampa
Established, 1913; for both feeble-minded and epileptics; 1915 Legislature failed to make appropriation to complete building partially erected

ILLINOIS

ILLINOIS INDUSTRIAL COLONY FOR IMPROVABLE EPILEPTICS, Dixon
Gerald M. Riordan, Managing Officer
Established, 1913; will be opened about June 1, 1917; for epileptics

LINCOLN STATE SCHOOL AND COLONY, Lincoln
Thomas H. Leonard, M. D., Managing Officer
Established and opened, 1865; for feeble-minded; capacity, 2,000

INDIANA

INDIANA SCHOOL FOR FEEBLE-MINDED YOUTH, Fort Wayne
George S. Bliss, M. D., Superintendent
Established and opened, 1879; for feeble-minded girls and boys 6 to 16 years old and feeble-minded women 16 to 45; capacity, 1,391

INDIANA VILLAGE FOR EPILEPTICS, New Castle
W. C. Van Nuys, M. D., Superintendent
Established, 1905; opened, 1907; for epileptics; capacity, 420

IOWA

IOWA INSTITUTION FOR FEEBLE-MINDED CHILDREN, Glenwood
George Mogridge, M. D., Superintendent
Established and opened, 1876; for feeble-minded; capacity, 1,500

STATE HOSPITAL AND COLONY FOR EPILEPTICS, Woodward
M. Nelson Voldeng, M. D., Superintendent
Established, 1914; Hospital division will be opened early in 1917, colony to be opened later; for epileptics; capacity, 100 on opening

KANSAS

STATE HOME FOR FEEBLE-MINDED, Winfield
F. C. Cave, M. D., Superintendent
Established and opened, 1881; for feeble-minded; capacity, 700

STATE HOSPITAL FOR EPILEPTICS, Parsons
M. L. Perry, M. D., Superintendent
Established and opened, 1903; for epileptics, including those insane; capacity, 560 (220 sane epileptics present January 1, 1916)

KENTUCKY

KENTUCKY INSTITUTION FOR FEEBLE-MINDED CHILDREN, Frankfort
S. L. Helm, M. D., Superintendent
Established, 1860; opened, 1861; admits feeble-minded children 6 to 18 years old who can be educated or trained; capacity, 400

No separate public institution for the epileptic

LOUISIANA

No public institution for the feeble-minded or for the epileptic

MAINE

MAINE SCHOOL FOR FEEBLE-MINDED, West Pownal
Carl J. Hedin, M. D., Superintendent
Established, 1907; opened, 1908; admits feeble-minded males between 6 and 40 years, females between 6 and 45 years; capacity, 283

No separate public institution for the epileptic

MARYLAND

ROSEWOOD STATE TRAINING SCHOOL, Owings Mills
Frank W. Keating, M. D., Superintendent
Established and opened, 1888; for feeble-minded; capacity, 700

No separate public institution for the epileptic

MASSACHUSETTS

MASSACHUSETTS SCHOOL FOR FEEBLE-MINDED, Waltham (Waverley P. O.)
Walter E. Fernald, M. D., Superintendent
Established and opened, 1848; for feeble-minded children; capacity 1,625 (including about 300 in Colony at Templeton)

MONSON STATE HOSPITAL, Palmer
Everett Flood, M. D., Superintendent
Established, 1895; opened, 1898; for epileptics of any age; insane epileptics also admitted; capacity, 1,200

SCHOOL FOR FEEBLE-MINDED, Belchertown
Established 1915; construction not started.

WRENTHAM STATE SCHOOL, Wrentham
George L. Wallace, M. D., Superintendent
Established, 1906; opened, 1907; for feeble-minded; capacity, 1,200

MICHIGAN

MICHIGAN FARM COLONY FOR EPILEPTICS, Wahjamega (Caro P. O.)
Robert L. Dixon, M. D., Superintendent
Established, 1913; opened, 1914; for epileptics; capacity, 362

MICHIGAN HOME AND TRAINING SCHOOL, Lapeer
H. A. Haynes, M. D., Medical Superintendent
Established, 1893; opened, 1895; for feeble-minded over 6 years; capacity, 1,481

MINNESOTA

MINNESOTA SCHOOL FOR FEEBLE-MINDED AND COLONY FOR EPILEPTICS, Faribault
Superintendent (vacancy)
Established and opened, 1879; for feeble-minded and epileptics; capacity, 1,600

No separate public institution for the epileptic

MISSISSIPPI

No public institution for the feeble-minded or for the epileptic

MISSOURI

MISSOURI COLONY FOR FEEBLE-MINDED AND EPILEPTIC, Marshall
R. P. C. Wilson, M. D., Superintendent
Established, 1889; opened, 1901; for feeble-minded and epileptics; capacity, 1,000

No separate public institution for the epileptic

MONTANA

MONTANA TRAINING SCHOOL FOR BACKWARD CHILDREN, Boulder
Herbert J. Menzemer, President
Opened, 1893; for feeble-minded children; capacity, 94; school open nine months in the year

No separate public institution for the epileptic

NEBRASKA

NEBRASKA INSTITUTION FOR THE FEEBLE-MINDED, Beatrice
D. G. Griffiths, M. D., Superintendent
Established, 1886; opened, 1887; for feeble-minded; capacity, 600

No separate public institution for the epileptic

NEVADA

No public institution for the feeble-minded or for the epileptic

NEW HAMPSHIRE

NEW HAMPSHIRE SCHOOL FOR FEEBLE-MINDED, Laconia
Benjamin W. Baker, M. D., Superintendent
Established, 1901; opened, 1903; for feeble-minded children; capacity, 280

No separate public institution for the epileptic

NEW JERSEY

NEW JERSEY STATE INSTITUTION FOR FEEBLE-MINDED, Vineland
Madeleine A. Hallowell, M. D., Medical Director and Superintendent
Established and opened, 1888; for feeble-minded; capacity, 785

NEW JERSEY STATE VILLAGE FOR EPILEPTICS, Skillman
David F. Weeks, M. D., Superintendent
Established and opened, 1898; for epileptics, and feeble-minded males over 21 years; capacity, 893

The state maintains 380 feeble-minded children, some entirely, some partially, in The Training School at Vineland—a private institution

An appropriation of $15,000 was made by the Legislature of 1916 for the establishment of colonies for the feeble-minded on forest reserves or other state lands

NEW MEXICO

No public institution for the feeble-minded or for the epileptic

NEW YORK

CRAIG COLONY FOR EPILEPTICS, Sonyea
William T. Shanahan, M. D., Medical Superintendent
Established, 1894; opened, 1896; for epileptics; capacity, 1,470

LETCHWORTH VILLAGE, Thiells
Charles S. Little, M. D., Superintendent
Established, 1907; opened, 1911; for feeble-minded and epileptics of unsound mind, not insane; capacity, 330

NEW YORK CITY CHILDREN'S HOSPITAL AND SCHOOLS, Randall's Island
W. B. Cornell, M. D., Medical Director
Established, 1847; department for feeble-minded organized, 1870; for feeble-minded and epileptic children of New York City; capacity, 1,940

ROME STATE CUSTODIAL ASYLUM, Rome
Charles Bernstein, M. D., Superintendent
Established, 1893; opened, 1894; for feeble-minded; capacity, 1,580

STATE CUSTODIAL ASYLUM, Newark
Ethan A. Nevin, M. D., Superintendent
Opened, 1878, as branch of Syracuse Institution; established, 1885, as an independent asylum; for feeble-minded women of child-bearing age; capacity, 1,050

SYRACUSE STATE INSTITUTION FOR FEEBLE-MINDED CHILDREN, Syracuse
O. Howard Cobb, M. D., Superintendent
Established and opened, 1851; for feeble-minded children under 16 years old, capable of improvement; capacity, 607

NORTH CAROLINA

CASWELL TRAINING SCHOOL, Hines (Kinston, P. O.)
C. B. McNairy, M. D., Superintendent
Established, 1911; opened, 1914; for feeble-minded over 6 years old; capacity, 200

STATE COLONY FOR EPILEPTICS, Raleigh
Albert Anderson, M. D., Superintendent
Established, 1907; opened, 1909; at present conducted as a department of the State Hospital for the Insane at Raleigh; capacity, 200

NORTH DAKOTA

INSTITUTION FOR FEEBLE-MINDED, Grafton
A. R. T. Wylie, M. D., Superintendent
Established, 1901; opened, 1904; for feeble-minded and epileptic; capacity, 263

No separate public institution for the epileptic

OHIO

INSTITUTION FOR FEEBLE-MINDED, Columbus
E. J. Emerick, M. D., Superintendent
Established and opened, 1857; for feeble-minded; capacity, 2,200

OHIO HOSPITAL FOR EPILEPTICS, Gallipolis
George G. Kineon, M. D., Superintendent
Established, 1890; opened, 1893; for epileptics; capacity, 1,980

OKLAHOMA

OKLAHOMA INSTITUTE FOR FEEBLE-MINDED, Enid
W. L. Kendall, M. D., Superintendent
Established and opened, 1910; for feeble-minded 5 to 16 years old, if over 16 maintenance must be paid; capacity, 400

No separate public institution for the epileptic

OREGON

STATE INSTITUTION FOR FEEBLE-MINDED, Salem
J. N. Smith, M. D., Superintendent
Established, 1907; opened, 1908; for feeble-minded and epileptics; capacity, 310

No separate public institution for the epileptic

PENNSYLVANIA

EASTERN PENNSYLVANIA STATE INSTITUTION FOR THE FEEBLE-MINDED AND EPILEPTIC, Spring City
William J. Steward, M. D., Chief Physician
Established 1903; opened, 1905; for feeble-minded and epileptics; capacity, 1,159

STATE INSTITUTION FOR FEEBLE-MINDED OF WESTERN PENNSYLVANIA, Polk
J. Morehead Murdoch, M. D., Superintendent
Established, 1893; opened, 1897; for feeble-minded; capacity, 1,773

VILLAGE FOR FEEBLE-MINDED MEN AND WOMEN, Glen Iron
Mary M. Wolfe, M. D., Superintendent (Lewisburg, Pa.)
Established 1913; not yet opened; for feeble-minded women of child-bearing age

The state maintains 700 feeble-minded children in the Training School for Feeble-Minded Children at Elwyn and 30 children in the Pennsylvania Epileptic Hospital and Colony Farm at Oakbourne, both private institutions

The City of Philadelphia is now erecting a large institution for its feeble-minded at Byberry, a suburb

RHODE ISLAND

EXETER SCHOOL, Exeter (Slocum P. O.)
Joseph H. Ladd, M. D., Superintendent
Established 1907; opened, 1908; for feeble-minded; capacity, 330

No separate public institution for the epileptic

SOUTH CAROLINA

No public institution for the feeble-minded or for the epileptic

SOUTH DAKOTA

STATE SCHOOL AND HOME FOR THE FEEBLE-MINDED, Redfield
J. K. Kutnewsky, M. D., Superintendent
Established 1892; for feeble-minded and epileptics; capacity, 303

No separate public institution for the epileptic

TENNESSEE

No public institution for the feeble-minded or for the epileptic

TEXAS

STATE COLONY FOR THE TRAINING OF THE FEEBLE-MINDED, Austin
Superintendent (Vacancy)
Established, 1915; to be opened, October, 1917

STATE EPILEPTIC COLONY, Abilene
Thomas P. Bass, M. D., Superintendent
Established, 1899; opened, 1904; for epileptics; capacity, 600

UTAH

No separate institution for the epileptic or for the feeble-minded. Commission appointed in 1916 to investigate needs

VERMONT

VERMONT STATE SCHOOL FOR THE FEEBLE-MINDED, Brandon
Frederic J. Russell, M. D., Superintendent
Established, 1912; opened, 1915; for feeble-minded children 5 to 21 years old; capacity, 171

No separate public institution for the epileptic

VIRGINIA

VIRGINIA COLONY FOR FEEBLE-MINDED
Established, 1912; opened, 1914; a department of the State Epileptic Colony for white women of child-bearing age; capacity, 112. A colony for negro feeble-minded was established in 1914 (not yet opened) as a department of the Central State Hospital for the Insane at Petersburg

VIRGINIA STATE EPILEPTIC COLONY, Madison Heights (near Lynchburg)
A. S. Priddy, M. D., Superintendent
Established, 1910; opened, 1911; for white epileptics; capacity, 500

WASHINGTON

STATE INSTITUTION FOR FEEBLE-MINDED, Medical Lake
S. C. Woodruff, Superintendent
Established, 1892; for feeble-minded and epileptic children under 21 years and feeble-minded adults under 50 years; capacity, 600

No separate public institution for the epileptic

WEST VIRGINIA

No separate public institution for the feeble-minded or for the epileptic

WISCONSIN

SOUTHERN WISCONSIN HOME FOR THE FEEBLE-MINDED AND THE EPILEPTIC, Union Grove
Established, 1913; ready for occupancy, January 1, 1918; capacity, 300 at opening; when completed capacity will be 1,476

WISCONSIN HOME FOR FEEBLE-MINDED, Chippewa Falls
Alfred W. Wilmarth, M. D., Superintendent
Established, 1895; opened, 1897; for feeble-minded; capacity, 1,160

WYOMING

WYOMING STATE SCHOOL FOR DEFECTIVES, Lander
Charles E. Lane, M. D., Superintendent
Established, 1907; opened, 1912; for feeble-minded and epileptics; capacity, 100

No separate public institution for the epileptic

CENSUS OF STATE INSTITUTIONS FOR THE FEEBLE-MINDED AND EPILEPTIC[1]

State	JUNE 1, 1890		State	JANUARY 1, 1904		State	JANUARY 1, 1910		State	JANUARY 1, 1916	
	Feeble-minded and Epil.	Ratio per 100,000 pop.		Feeble-minded and Epil.	Ratio per 100,000 pop.		Feeble-minded and Epil.	Ratio per 100,000 pop.		Feeble-minded and Epil.	Ratio per 100,000 pop.**
Ohio	848	23.1	Ohio	2,085	48.1	Mass.	2,158	64.1	Mass.	3,562	96.5
Minn.	300	23.0	Minn.	888	46.5	Ohio	2,982	62.5	Ohio	3,612	70.6
Iowa	423	22.1	Mass.	1,267	42.1	Minn.	1,194	57.4	Minn.	1,537	67.9
(N. Y.)*	(1,068)	(17.8)	Iowa	970	41.3	Iowa	1,186	53.3	Iowa	1,493	67.2
Conn.	129	17.3	Ind.	1,036	39.3	(N. Y.)*	(4,646)	(50.9)	(N. Y.)*	(6,767)	(66.5)
Ind.	272	12.4	(N. Y.)*	(3,033)	(39.2)	Ind.	1,250	46.2	N. H.	280	63.4
N. Y.	734	12.2	Cal.	540	34.1	N. Y.	3,733	40.9	Ind.	1,606	57.2
Mass.	267	12.0	N. Y.	2,630	34.0	Wis.	918	39.3	N. J.	1,472‡	50.5
Ill.	441	11.5	Neb.	337	31.5	Neb.	446	37.4	N. Y.	4,827	47.4
Neb.	115	10.9	Wis.	611	27.7	Cal.	825	34.7	Wis.	1,160	46.7
Ky.	154	8.3	Kan.	402	27.0	N. J.	863‡	34.0	Md.	615	45.3
Kan.	106	7.4	Ill.	1,251	24.2	Mich.	946	33.6	Kan.	813	44.7
Cal.	83	6.9	Pa.	1,579†	23.7	Kan.	567	33.5	S. D.	303	44.0
N. J.	99‡	6.9	Conn.	219	22.6	N. H.	144	33.4	Mich.	1,331	43.9
U. S.	4,001	6.4	N. J.	450‡	22.0	Pa.	2,341†	30.5	Neb.	529	41.8
Md.	30	2.9	U. S.	15,599	19.3	S. D.	176	30.1	Cal.	1,164	40.2
			Mich.	469	18.6	Conn.	294	26.3	Pa.	3,241†	38.3
			N. H.	64	15.0	U. S.	23,358	25.4	Ore.	310	37.7
			Wash.	81	14.0	N. D.	145	25.1	Me.	279	36.2
			S. D.	51	12.1	Md.	298	23.0	N. D.	253	34.9
			Md.	139	11.2	Ore.	148	21.9	Wash.	523	34.8
			Ky.	146	6.4	Ill.	1,221	21.6	U. S.	34,137	33.7
			Texas	208	6.2	Wash.	159	13.9	Ill.	2,000	32.7
			Mo.	176	5.3	Mont.	51	13.5	Wyo.	57	32.2
						Mo.	400	12.1	Conn.	391	31.7
						Texas	447	11.4	R. I.	155	25.5
						Ky.	208	9.0	Mont.	90	19.9
						R. I.	48	8.8	Va.	404	18.5
						Me.	62	8.3	Mo.	567	16.7
						N. C.	148	6.7	Ky.	355	15.0
									N. C.	357	15.0
									Texas	500	11.4
									Okla.	240	11.1
									Colo.	81	8.5
									Vt.	30	8.3

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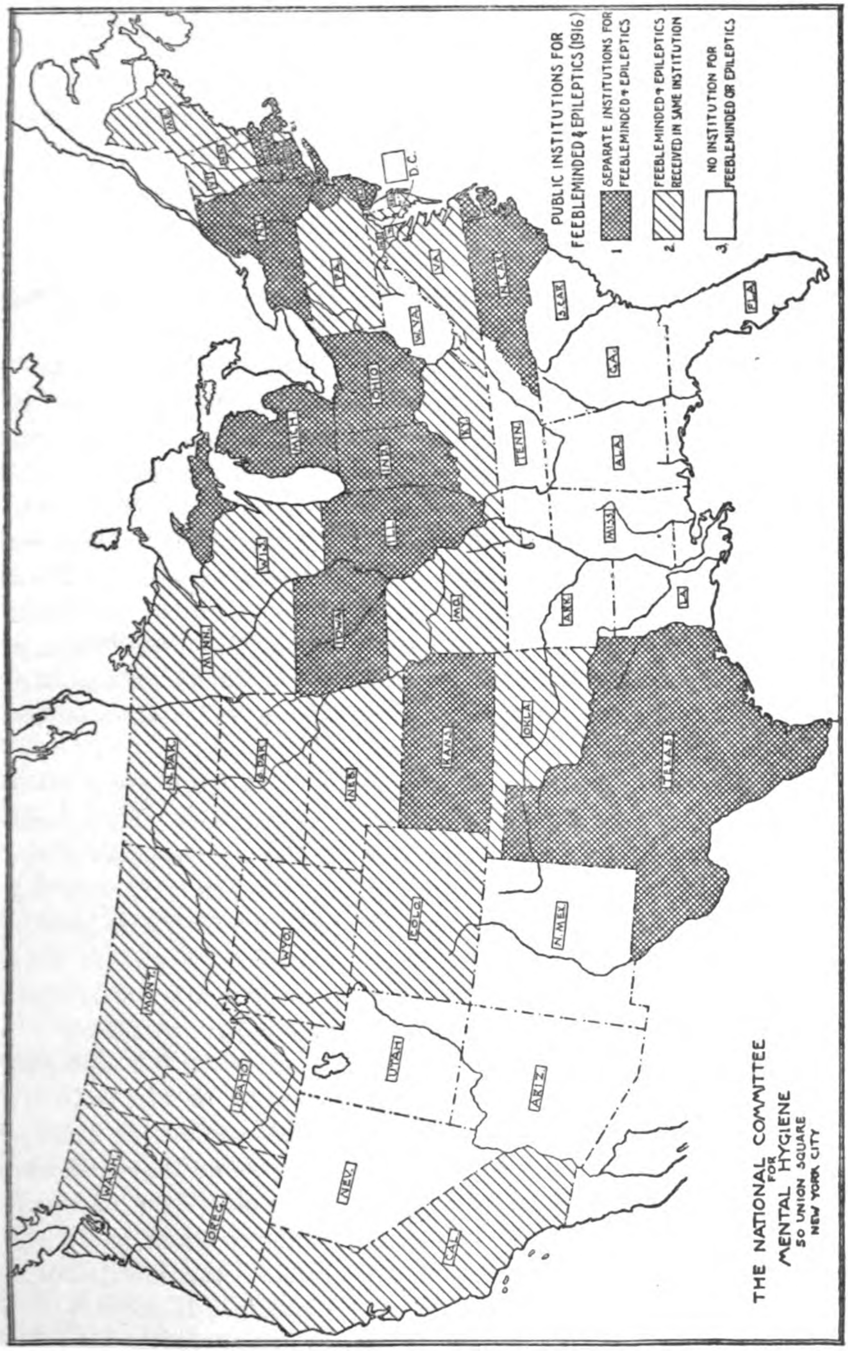
[1] Prepared by The National Committee for Mental Hygiene, 1916. * Including New York City. † Including state charges at Training School, Elwyn, Pa., and at Epileptic Hospital, Oakbourne, Pa. ‡ Including state charges at Training School, Vineland, N. J. ** Based on population estimated by U. S. Census Bureau.


PUBLIC INSTITUTIONS FOR FEEBLEMINDED & EPILEPTICS (1916)
1 SEPARATE INSTITUTIONS FOR FEEBLEMINDED + EPILEPTICS
2 FEEBLEMINDED + EPILEPTICS RECEIVED IN SAME INSTITUTION
3 NO INSTITUTION FOR FEEBLEMINDED OR EPILEPTICS
THE NATIONAL COMMITTEE FOR MENTAL HYGIENE
50 UNION SQUARE
NEW YORK CITY
WASH.
OREG.
CAL.
NEV.
IDAHO
MONT.
UTAH
ARIZ.
WYO.
COLO.
N. MEX.
N. DAK.
S. DAK.
NEB.
KANS.
OKLA.
TEXAS
MINN.
IOWA
MO.
ARK.
LA.
WIS.
ILL.
MISS.
MICH.
IND.
KY.
TENN.
ALA.
OHIO
W. VA.
VA.
N. CAR.
S. CAR.
GA.
FLA.
PA.
N.Y.
ME.
D.C.

MENTAL ADAPTATION

FREDERIC LYMAN WELLS
Psychologist, McLean Hospital, Waverley, Mass.

EVERY living thing in order to live must behave towards the outer world in more or less restricted ways. The simple bit of living substance that we call the amoeba is endowed with only a few of these ways to act. It can move by extending its "false feet" in a given direction. When it meets a particle of food it must spread itself out over it to consume it; when it meets an injurious substance it must roll itself into a ball and so offer the least exposed surface. By these ways of behaving, or reactions, the animal and its kind survive; the reactions described are thus well adapted for that individual and its environment. An amoeba that rolled itself up on touching food, or one that spread itself out over poison, would show a condition quite similar to those disorders of conduct to which, in human beings, we have rather unfortunately applied the term insanity. It would be unable to look after itself and in the absence of care by its fellow-creatures would perish. Life depends upon adapted behavior.

Organisms higher in the scale of evolution have much more numerous and complicated ways of reaction in life. They build snares that catch their food; they escape the uncertainties of the chase by vegetable supplies which they can control; they lay aside stores of food for times of scarcity or for their young; they conceal themselves when their enemies are about; they build shelters; they form social systems; and a marvelous complexity of reaction develops about the reproductive instincts.

We understand that in the progress of evolution different structures are developed which are adapted to the animal's purposes, the protective mimicry among insects affording some of the most exquisite examples. In just the same way different abilities for reacting develop which better meet the demands of the outside world. The dragon-fly builds no house at all; the mud-dauber wasp, but an unsightly affair; the honey-bee a structure that has the respect of architects. History is the record of the modification of behavior in our race. Leander swam the Hellespont; his descendants fly it.

The adaptations that animals must make have a three-fold division: the search for food, the lookout for enemies, and the continuation of the species. To whatever extent the animal reacts in ways achieving these ends we speak of that organism's behavior as in good adaptation to its environment, or as well-balanced. The orb-weaving spider must not come down into its net until it is too dark for the wasp to fly; the tiger must not be too slow in seizing or too impatient in awaiting the deer that comes down to drink. If they did, they would carry out ineffectively reactions all right in themselves. But in the inscrutable wisdom of Providence it is so ordered that actions which are very good for one of an animal's interests can be very bad for another. The brook-trout incautiously pursuing the minnow is set upon and devoured by the pickerel. The spiderling that loves not wisely but too well is seized and eaten by the object of his unwelcome devotion. And when the wolf keeps cautiously approaching the bait in the trap and again drawing away on perceiving the suspicious scent, he shows in simplest form the never-ending *conflict* between instinctive trends which plays such a universal part in life, and in human beings is the source of nearly all its difficulty.

The right thing being defined, the best adaptation lies in the most effective doing of it. How effectively a given "right thing" can be done, is clearly not inaccessible to experimental study. The main structure of comparative or animal psychology is built upon just such problems. We place the animal in a situation to which he must react in a certain way to get his food. The difficulty of this situation and the factors that enter into it we can and do vary within wide limits. We can see whether the animal can learn to locate his food by going to the right or left, by going where a certain light or color is shown, by finding his way through a maze or by opening a box, and we can measure how long it takes him to acquire the ability to make these adaptations as well as how many and what sorts of mistakes he makes. The comparative psychologist tries to find out how complex and what kind of situations the animal can adapt himself to, and how much his behavior can be modified to make adaptations to surroundings that are quite strange to him. Only a small part of human psychology has dealt with problems like this. They are included in what we call the "choice reaction" experiments. The subject is told to do one thing when he gets one sort of stimulus, and another thing when he gets another sort of stimulus. For example, he is to tap with his first finger when he sees a red light, with his second finger when he sees a blue light, and with his third finger when he sees a green light, etc. In doing things of this sort people will make mistakes now and then, just as in typewriting one strikes a wrong key occasionally, although knowing perfectly well which is the right key to strike. These "false reactions," as we call them, are failures of adaptation to the situation given us, just as it is a failure of adaptation when the animal looks for his food in the green compartment when he is being trained to look for it in the red. The aim of these experiments is to create situations that call for different sorts of movements, and by measuring the quickness with which the subject acquires these proper movements, and the number of false movements he makes, judge of his adaptive capacity to the situations.

Every sort of human perception, from color sense to moral sense, can be dealt with in this way, but we meet a certain difficulty when we would interpret these observations as directly as we can interpret them in the case of animals. The comparative psychologist often grumbles about the artificiality of the conditions to which he has to subject his animals to experiment with them. Yet, what a veri-similitude of nature they are beside the conditions in the laboratory of human experiment! No such direct and primal motives are likely to enter into our psychological experiments as the animal's quest for food. To get near these we must go to Nature's laboratory, and observe her experimental studies of our struggle for existence. If the hunter misses his game he misses his dinner, but the psychologist who strikes the right hand telegraph key when he should have struck the left merely makes a dot in the wrong place on the ribbon recorder. The difference between the adaptations of life and those of the laboratory is just the difference between shooting for a livelihood and shooting at a target. A good game shot will ordinarily be a fair target shot, but a fine target shot may be a poor game shot. With human beings we cannot bring our laboratory experiments into such immediate connection with the fundamental trends as those of animal psychology can be brought. But, on the other hand, the fundamental trends do not enter so directly into our lives as they do into those of animals. If the correctness of our laboratory adaptations is artificial, remember that the proper thing in life is also very much a matter of convention. If one can put forth his proper efforts only when his next meal depends upon it, one is likely to spend his life in just such efforts to get his next meal. This theoretical objection, therefore, has its theoretical answer, and in no way precludes the hope of finding practical value in such experimentation. Recollect, also, that the industrial operations we live by are made up of choice reactions, often exquisitely subject to experimental control. The choice reaction experiments cover a great range. They lend themselves well to the study of personal traits like the capacity for sustained adaptation or the capacity to keep the adaptations free of interference from minor distractions or emotional shocks. They have immediate value for studying the efficiency of productive labor.

Up to this we have thought of adaptation entirely in terms of behavior and conduct, thus emphasizing in every case the motor act upon the outside world. This is necessary in order to give the best definition of good and bad adaptations, since it is in these objective instances that the good or bad result of the adaptation is most immediately evident, and could be illustrated by the clearest examples. We are now ready to make the shift of our viewpoint that brings us quickly to the focus of our subject. We all know what a chemical reaction is, as when zinc and hydrochloric acid change into zinc chloride and hydrogen. We know what a physiological reaction is, as when the frog's muscle contracts to the stimulus of the electric current, and in the same way we define our highest types of voluntary behavior as reactions for which the antecedent situation is conceived as the stimulus. But it is plain—and also essential—that the movements or behavior we can observe in such a process are very far from implying the sum total of what happens in us. If John hears that his absent friend, James, has received a distinguished honor, his only outward and visible reaction may be to write him a letter of congratulation, but his total response to the news contains a vast number of mental associations, images of his friend and the circumstances of his good fortune, pleasure that James's good qualities have brought a well-earned recognition, jealousy that he did not get it himself, etc. With nearly all these things we can deal only as activities of the mind. But they are just as much reactions to the event as the writing of the letter. They might even not be involved with any direct motor reaction. Thus our sympathies in the European war, our opinions about Japanese exclusion or woman suffrage, represent our mental reactions to these propositions, whether or not they have produced any characteristic reaction in our conduct. All mental process is, indeed, simply mental reaction to what has gone before. And these mental reactions, equally with motor reactions, are good or bad according as they contribute to the advancement or detriment of the organism. Generally speaking, sincere pleasure at his friend's good fortune would be a good reaction on John's part. Jealousy, feeling that he himself deserved it more, a "what's the use of trying" attitude, would be a distinctly bad mental reaction. Comparative psychology can deal with the mental processes of animals only by inference from their movements, and it is fair to assume that the animal processes are so much simpler than ours that the behavior criterion is enough. But ordinary good sense tells us what a treacherous guide visible human reactions are to the motives, real or pretended, that lie behind them and what grievous mistakes would be and often are made in attempting to act upon inference therefrom. Most thoughts have no immediate and unequivocal motor expression that we can observe.

A great philosopher asks us to suppose that our whole being and all that existence means to us are dependent upon our some day winning or losing a game of chess. Is it not likely that we should spend considerable time in learning the commoner opening gambits and end-games, in studying the games of other players, and in the solution of problems? What should we think of parents or educators who would allow their charges to grow up without teaching them that a rook is more valuable than a knight, or that a pawn becomes a queen upon reaching the eighth row? Yet the worth of existence does depend on success in a game infinitely more complicated than that of chess, in which no mistake is ever overlooked and no move ever taken back, and where knowledge from one's own experience often comes too late to use it.

Our moves in this game are the reactions by which we seek to adapt ourselves to the play around us, and many essential reactions are such as we can deal with only as mental reactions. We see some people playing this game well, others poorly, some, like the feeble-minded, so poorly that they cannot play it by themselves at all. The dynamic psychology presented in these remarks consists in bringing these reactions together as processes of adaptation, with particular reference to whether, so far as experience will teach us, the adaptation is good for the individual or bad. A great many mental reactions are bad because they seek to meet material wants in a mental way, which is easier; just as if an animal should seek to escape starvation by simply imagining food. Yet exactly such attitudes and bad ways of reacting to things in life often result from being misled about the real nature of the reactions and the particular dangers that underlie them. When we talk of controlling the external forces of nature, we mean that we know their principles better and are able to act more intelligently in accord with them. Thus do people get the best control over their own personalities, by an open understanding of the forces at work there. Plain living and high thinking is an ideal; but high living and *plain* thinking is another that is not be be despised.

Every animal, from amoeba to man, has certain things which it tries to get, and when we see an animal trying to get things, we say that is something the animal wants. The harder the animal tries to get it, the more it is apparent that the animal wants it. So far as we can gather, animal wants are regularly pursued to their realization except where external factors prevent it, and there is probably no human obstacle that does not yield to a strong enough human will, but human ambitions and desires are much less elementary and more crossed or interfered with by *opposing trends within* us. We may want a thing, but it may necessitate our giving up something else we want to keep, or we may dislike to face the inconveniences, the hardships, the dangers, that are a part of having it. All this will make our striving for it less effective, perhaps so much so that it becomes impossible for us to get what we want. To situations like this, which life is full of, the mind has definite ways of adapting itself.

There is no better way of showing the principle of one of these reactions than by enlarging somewhat upon that sterling and classical illustration of mental adaptation to an impossible wish, the parable of the fox and the grapes. My colleague, Dr. Brill, would doubtless have made this fox an only child whom the flattery and adulation heaped upon him had persuaded that he was an individual of distinctively superior worth and agility. His self-love not tolerating the admission that he could ~~not~~ reach the grapes, he made the mental adaptation to his failure of taking the attitude that they were sour and not worth reaching, so that there was no admission of weakness in not getting them. But soon he comes to a similar bunch of grapes that hang within an inch of his nose. "These are just the same," he reflects; "if I took these people might think I lied when I said the others were sour. I am no liar, but always consistent, and true to myself." So that when the pangs of hunger finally do force him to take them they are spoiled, and give him a well-earned indigestion.

This first type of adaptation to an unattainable desire consists, therefore, in denying its existence, and minimizing the value of the thing wished for. It is a bad type of adaptation because the wish is genuine nevertheless, and the false attitude makes it much harder for us to meet any future situation in which the wish could and should be realized.

A second type of adaptation concedes the value of the end desired, but lacking the strength or unified will to attain it directly, meets it by imagining a realization. These reactions are much more complex that the mere denial of the wish, and their essentially mental quality is distinctive. The day-dream is their most universal example. Here a genuine pleasure is got from picturing the trend as realized, though we preserve the sense that it is not so, and do not act as if it were. Mental disease, however, shows instances in which these fancies do get away from the person so that they seem reality—they are called "wishfulfilling deliria." These are very evident cases of substituting imagination for reality which need only to be mentioned to be understood. Just as many of us can call to mind music or natural scenery in ways that give us pleasure, so it is pleasant to create for ourselves images of the more complex events and surroundings that represent our ambitions and our hopes.

The stock of imagination that we get from our own experience is powerfully reinforced by the things which other people imagine for us and put at our disposal in the form of literature. We read novels for entertainment, and the source of that entertainment is that they regularly depict, or at least culminate in, situations in which we would like to find ourselves. The small boy likes his Monte Cristo because it supplies him with the material to identify himself with a great and powerful personage such as most people would like to be. A novel or similar imaginative production holds our interest, "grips" us, so to speak, in so far as it suggests to us persons that we would like to be or episodes that we would like to experience. This is not altered by the fact that these likings are not necessarily such as to be clearly understood.

Thoughts of pleasant things, things that meet the normal trends of our organism, are normally pleasant thoughts, thoughts that we like to encourage. But it does not always work this way. There is a definite state of the human mind in which it is unpleasant and even painful to contemplate brightness or happiness elsewhere. The sufferer from melancholia draws his shutters tight upon the cloudless day that he may not behold the smiling face of nature. A young man of inferior constitution frankly tells us that he cannot read love stories because they bring too near home to him his own failures in this regard. In situations of this kind the mind flees the imagination of normal human happiness and seeks a solution amid fancies of tragedy and suffering. Another type of imaginative reaction, still presenting an abnormal solution of our trends, works out a happy solution through situations that often cut much further loose from reality. Good literary illustrations of both these reactions can be found in the stories of Edgar Allan Poe. Thus the depressive or tragic reaction is exemplified in such imaginations as *The Fall of the House of Usher*, or *The Pit and The Pendulum;* the opposite is seen in such fancies as *Eleanora, Ligeia,* or *The Domain of Arnheim, The Assignation* has elements of both types.

The free imagination of wished-for things can work out well by painting in more glowing colors the excellence of what we wish for, and firing our ambition to strive for it the more intensely. As in Miss Bryant's novel, little Jim Hibbault trudged along by his exhausted and self-immolated mother. "I'll make roads when I'm big," he told her, "real good ones that you can walk on easy." "A vision," the novelist tells us, "of countless toiling human beings traveling on his roads all down the coming ages, knowing them for good roads, and praising the maker." And such roads we know he did build, not only for people's feet, but for their lives. No possession is more precious than the power to create such visions, so long as it gives stimulus for putting them into action. But the case is not always so fortunate.

Physics teaches us that if we subject a substance to different forces, like temperature or pressure, we reach what are called "critical points," that is, above and below which the properties of the substances are greatly different. Water has critical points at 32° or 212° Fahrenheit, where it freezes, or changes into steam. Imagination acts upon our characters in the same way. It has a critical point where we cease to be fired by imagination, but drop back upon it alone. Poets have sung the mental delights that can come from nothing but imagery, and, what is equally important, imagination carries with it no dependence upon, nor responsibility to, the external world.

This fact that day-dreams are not continually checked up with experience makes it also possible for them to take on forms that do not fit the actual conditions of one's life. In this way people, without seeing what the actual values of life are, can in earlier years build up ambition whose satisfaction would never bring satisfaction with life. These false attitudes, again, make it much harder to act according to the ways that do bring a good adjustment to life. Thus nearly all younger persons have some imaginations about their future households and how they would like to have them; yet the more elaborate and fixed these become in the mind the more difficult, perhaps impossible, such ideas can make it for the individual to know and make use of genuine solutions when they present themselves.

The voluntary movements that we make, we regard as indeed "voluntary"; that is, we feel that we act so because we judge it best so to act, and that we could act otherwise if we chose. So deep-rooted is this feeling of the freedom of our actions, that when this is lost, it stands out as a conspicuous symptom of mental disease, where it is known as "ideas of influence," or the "feeling of passivity." This feeling of the independence of our actions seems very closely associated with, perhaps the cause of, another very prominent mental fact, namely, a feeling of motive for our actions. As we control our actions, we want them to have a reasonable motive—man calls himself a rational animal, one that is guided by reason in its conduct. A specific mental adaptation that our acts demand is therefore the assignment of satisfactory motives for them.

The process by which we derive these satisfactory motives is known as rationalization—to rationalize an act means to assign for it a reason satisfactory to ourselves. The first thing to note about rationalization,—wherein it differs as night and day from genuine reasoning governed by experience—is that it is very personal and subjective. John tells us that he threw up his job because his chief did not treat him squarely, but James, whom the chief treated in quite the same manner, does not feel unjustly dealt with. John's rationalization does not give the real cause, which lies in a difference of personality between John and James. James says he does not marry because he gets only twenty-five hundred a year, but most people marry on far less. We must always go further back, and ask, why is that reason so effective with this particular person?

Our rationalizations give a motive which our personality will accept as a fitting one without giving the real cause of our actions. Now the real motives for our conduct often go back to fundamental trends which we have been taught to regard as degraded, that we are base if we act from these motives, and thus our acts are regularly rationalized in the name of some other principle that we have been taught to respect. If our neighbor insults us, we strike him not because we are angry, but because our honor demands it; we refrain from doing so not because we are afraid, but because it would lower our dignity. "How can sin be sin," asks one philosopher, "if through it I rise to spiritual heights before unknown?" Such are our mental adjustments to whatever conduct our pugnacity or our temptations may occasion; just as the fox rationalized his not trying for the grapes on the ground that they were sour.

Where our impulses are strong enough and united enough, rationalizations play a small rôle, and may scarcely be thought of unless somebody asks us for one. "I want to do this, I don't need any reason for it," speaks the voice of sincerity self-assured. Rationalizations play their special parts in justifying something we are not really sure of, and in bolstering up an impulse against counter-impulses that are themselves strong enough to block it. They are like the floaters that are brought by corrupt political organizations to carry doubtful elections. The more dependent we feel upon the rationalization of an act, the more certain it is that there are powerful factors in the personality opposed to it and the falser the rationalization is likely to be, so that we need not wonder if these same reasons quite fail to move us in other times and circumstances. Who then tries to be true to his rationalizations is a traitor to himself. He is like a man riding a bicycle who turns his wheel one way when his natural leaning is the other. The test of character is the abiding by firm standards of certain things we will do and certain things we will not do in defiance of the rationalizations that come every day to help us tear them down. The subtlest tempting to evil is that which comes disguised as rationalization of the unworthy impulse. The real conflicts of the soul are not between good and evil, but between rationalized good and right. So did the Indian mother throw her child into the Ganges; and, being widowed, burn herself on her husband's pyre, rationalizing these acts as religious duties; so did many ancients rationalize the sacrificial slaughter of useful animals and even of their fellow men. We have learned to realize the inappropriateness of such conduct, though we still rationalize a value into the giving up of many vital personal aspirations.

Of course we apply rationalization not only to our acts, but also to our opinions and points of view. We manufacture reasons for our likes and dislikes, and even more for our approvals and disapprovals. Thus a scientific investigator may put forward a result or a doctrine which is distasteful to us personally because it shows us in an unpleasant light to ourselves, or because we secretly feel it superior to what we ourselves could have done. The office of rationalization is then to discredit this work of our intellects. Not the least of the obstacles to psychological progress is that to be practical it has to be personal, and in being so it encounters a host of instinctive prejudices difficult to deal with because so well concealed from their holders. A proper representative of psychological science must be able not only to tell the truth to his own disadvantage, but also to accomplish the harder task of believing it. Rationalizations of thought or conduct in terms of moral principle are precisely the function of the so-called "elastic conscience." Religion indeed, whose purpose is to make people better, may be made to rationalize very infamous actions. Large scale instances are the torture of heretics and the execution of witches. These are the work of cave-keeping evils of human nature which take from religion the convenient disguise of an act of faith.

In short, the objects that rationalization serves are to provide the feeling of moral and logical justification for our acts and thoughts, to supplement our feeling of their freedom, and to keep us at temporary peace with our own natures. Enough instances have probably been quoted to show that the ability to rationalize an act is small guarantee of its real moral or logical value. Life is built of effects we produce, not of motives we make believe.

The most important and coherent system of adaptive mental reactions that humanity has evolved is that of religion. The primitive attempts were simple, as were perhaps the minds whose needs they had to meet. A conception of how the world came to be, of the interference of supernatural forces in the world's affairs, of some existence after death, and the mind was satisfied. Religion has always served an important social purpose in giving to a people the sense of solidarity, faith in their common cause, contributing to victory in conflict. This, as Karl Pearson points out, gives them great advantage over people not bound together by any such ties. Natural selection would thus develop a humanity with some degree of religious evolution, quite apart from the supreme value of religion for the individual. But as individual life becomes more complex and fraught with difficulties more keenly felt, the mind demands, and supplies, religion that will meet its difficulties in a more personal way. We must appreciate that there are two sorts of these difficulties, one the simple impossibility of realizing the conditions of normal human happiness, which are nevertheless desired and striven for, the other the negation of these conditions, supplanting them by abnormal ideals. Religion has its compensation for the first of these difficulties, but not for the second. The losing that is true dying is not the loss of the object of value, but the loss of the sense and impulse of its value. Take the belief in immortality, for instance. This is the response of the human mind to the wish for further good things it has learned to know on earth; for a continued spending of our energies, or a meeting again with loved ones; perhaps it has failed of the good things of life here, but it has not lost the sense of their being good, and wants another chance for them. If one denies the values of life, and tries to live it in ways not worth living, this faith loses all its sustaining power. Rationalizations aside, the persistence of this belief betokens in general—not in every one—a better adaptation to life than the loss of it. Further stimuli to religion are the sufferings of those dear to us when we can do nothing to help. Powerful religious impulses, as in the form of prayer, spring up at such times, which may be quite in contrast to a person's ordinary habits of thinking. Again, we make our own sufferings more tolerable. We identify them with a cause in which others have suffered far more. Are we not frankly told that the Christian life is "many a sorrow, many a labor, many a tear," but that it brings ultimate triumph, "Sorrow vanquished, labor ended, Jordan passed?" What awaits him "Who best can drink his cup of woe, triumphant over pain?" By this value that they gain for us, we develop the endurance of hardship, resistance to temptation, capacity for sacrifice, and for effort in the face of discouragement, which make religion the greatest human force in the control of conduct the world has seen.

The reverse side of the picture is that a value gets attached to beliefs, also to suffering and self-abnegation, for their own sakes, without reference to any good they accomplish in action; the "fugitive and cloistered virtue" that Milton found he could not praise. All sorts of religious reactions find a natural expression in hymns, and there are some which show this only too well in an ecstasy of sorrowful emotion that is spent entirely on itself. This is not the bread of heaven that gives strength for the daily task, but an opiate bringing stupor and narcosis.

The greater share of human happiness depends on the fitness of sexual adaptations, and most of the wreckage of human happiness is strewn upon the reefs with which humanity itself encompasses them. In life as we know it, the final normal adjustment of this trend is made in marriage, where a man and woman administer a household and rear children. Whatever makes this adaptation easier and better is good; whatever makes it worse or more difficult is bad. Instinct left to itself regularly takes care of itself; but we, who adjust it to the requirements of a social order, must safeguard it until those requirements are met. There is a general principle—a phase of the law of inhibition of instinct by habit—that it is bad for any instinct to make partial responses to it which at some point have to be frustrated. It develops, perhaps unconsciously, a habit of stopping short which makes it more difficult when the time comes to go the rest of the way. In the erotic sphere this law has its chief human application. Thus it is well known that indulgence in the more pronounced reactions of flirtation can impair the capacity for the deeper attachments required in marriage, without which one does not make in a whole-hearted way the sacrifices that marriage involves. There are bigger fish in the sea than ever were caught, but one does not get big fish if little ones steal the bait. From the educational standpoint, it is wiser to teach this self-control on the basis of healthiness and proper care of one's self, than because the indulgence has some vaguely immoral quality.

One refrains from spending every night at the theatre, or drinking a dozen glasses of good punch at a reception, and other things that one admittedly would thoroughly enjoy doing, when one realizes that they are not good for him and that they make him less fit for things that it is more important for him to do.

It appears that just as people differ a good deal in the amount of alcohol that they can take, some people are much more unfavorably affected than others by these frustrated erotic reactions. Where the problem is nothing but to eliminate them, the proper conduct of life is more definite and easier. Some people are so fortunate that they step from an apparently extreme inhibition of these reactions to a normal adaptation in love and marriage. But others who follow this course illustrate, to their cost, that the inhibition of instinct by habit, like other good rules, is one that works in all sorts of directions. The instinct that leads towards sexual reactions does not originally have the fixed tendency that it does in normal adult existence, but in earlier years it is exceedingly subject to distortion, and there are few things in life which it cannot attach itself to. If one builds a dead wall of repression across the development of this trend, it does not accumulate a great reservoir of energy to make use of in the proper time half so much as it blocks up the proper course of a trend which knows how to cut many other channels for itself. It is important, therefore, to have in life some positive influences which will develop a healthy type of sex consciousness. Good personalities do not avoid, but take special pleasure in, various activities when they are shared in mixed company. The essential condition of the healthiness of these reactions is that they be accompanied by bodily activity, especially of large muscle groups. Dancing is the natural prototype of these, if not their best example. A greater value in this respect attaches to more active things, such as tennis, boating, swimming, various forms of the "wild life" and many others in themselves good bodily recreations in which men and women meet upon terms of sharing or competitive effort. An interesting sidelight upon this comes again from my colleague, Dr. Brill, who obtained accounts from many persons in regard to the mental effects of some of the new dances. According to his findings, grosser erotic feelings appear to be much more frequently evoked by watching them than by participating in them, where the bodily activity is present.

Attitude and conduct in this sphere are ever subject to the influence of surroundings. It is the soundest of observations that example is better than precept, and precept better than instruction. In fact, the strongest argument against the so-called campaign of enlightenment in these matters has been that mere information is of so little value in governing conduct. One may well know what healthy character in this regard is, but the best use to make of knowing it is to keep in the society of those who have it.

Another consideration applies especially where the environment permits the intellectual over-refinement of erotic feelings. Good personalities react to this trend not merely as an instrument of pleasure, nor simply to meeting its primary biological purpose, but attach essential value to both these phases of it. Of the thousand rationalizations of unhappy marriage, every one may originate on a physiological level. Neurosis, alcohol and the divorce courts wait on those who try to live around this.

Where the adaptation of marriage is not made, or is poorly made, this may be ascribed partly to the non-occurrence of external opportunities for it but very largely also to the internal resistances to it, which are developed in the many ways already spoken of. Though possibilities of adequate adaptation present themselves, they go unrecognized or unreacted to, or if an attempt is made to meet them it is such a weak one that it is bound to fail. In these cases, where personal resistances have played the important rôle, there results in general a defective adaptation to life itself, with more or less well-concealed embitterment at the failure. To the event of there not being the normal possibility for adequate adjustment, individuals can adapt themselves in relatively as healthy a way as they would have done to the more usual situation, even living careers of conspicuous social value. Good personalities overcome the difficulty by freely recognizing it and openly making the best of it. The effective means of doing this are in the development of strong external interests that prevent the withdrawal into self, by any form of direct service to society, by the pursuit of idealized ambitions, and thus, like the ancient Epicureans, by cultivating the mental luxuries of life, make bold to dispense with its necessities.

It is a property of the human mind that the feeling originally attaching to one set of impressions or reactions can be transferred to another that stands in some association with it.

Sometimes this association is very superficial, as when having much enjoyed a play at a certain theatre, one looks forward with pleasure to going to that theatre again, though the play and company are different. Again, the association may be very obscure, as it is in the symptoms of some mental diseases. Thus certain things through our special experience in connection with them and our elaborations of them come to mean much more to us subjectively than they do objectively. This principle plays a great part in mental adaptation. The mind can endow certain thoughts and actions with an extreme value—that is, it idealizes them. One man tries to build as good an automobile as he can; another tries to make himself as good a chess-player as possible; another sees the whole world in knowing the most about Shakespeare; another tries to be the most skilful bricklayer that he can. Practically anything can be idealized in this way, so that it compensates for the loss of all else, and all else is sacrificed to it. The striking thing about these ideals is that while some are of great value for one's relation to the external world and others of practically none, to the person who holds them the latter mean at least as much as the former. In itself it means no more to the surgeon to set a difficult fracture that it does to the Assyriologist to decipher a forgotten cuneiform. It can well mean less, for the surgeon can get high prices for repairing injured bodies, while the value of deciphering the inscription depends almost entirely on the subjective enthusiasm that the scholar brings to it. Our minds of themselves give sacredness to ideals, just as they give convincingness to rationalizations.

Where such ideals are developed simply as compensations for the un-lived-out portions of the fundamental trends, they serve well their primary purpose of balancing the personality, and may, indeed, play an important part in enabling the trends to be better lived out. Thus the famous painter's devotion to his art may be of conspicuous economic value to him and his family. Certain influences of rationalization and environment may distort the ideals so that they have no correspondence with the main trends of the personality. An adequate meeting of the fundamental trends requires of the individual some degree of self-assertion to the external world. Active competition for the means of meeting these trends is an essential part of getting them, which makes definite demands upon material effort, willingness to act in the service of others, aggressiveness against the opposed will of others. The things that can be idealized differ widely in the demands of this nature that they make. Those of the political and industrial worlds are great, those of the intellectual and aesthetic worlds are relatively small. Rationalization comes to the aid of these latter, to help those personalities "who instinctively crave a refuge from the domineering, refusing, and wheedling of social enterprises in general," to find that refuge in the more passive ideals of this type. The most extreme ideals may thus be formed in directions which have no expression in action, face no test of concrete experience, and whose only satisfaction is self-satisfaction. There are many people whose entire happiness is bought with just such illusions.

A fox, being forced to content himself with sour grapes, fervently declared they were the best he had ever had. But it would be a sorry proceeding to feed them to the little foxes, and teach them that there were no better things in the world to eat. That education is a traitor to society which teaches or allows it to be thought that the ultimate values of life lie in directions that tend toward satisfaction in self and away from meeting the objective fundamental trends of the personality. Subjective ideals may be a fair substitute for reality, but they are a bad preparation for it. Honest people are free to assert that a million dollars is a good thing to have, and that, if its sordid treasure spreads to work you harm, it is your fault and not that of the million dollars. But suppose that at the hands of poor and dishonest mentors one had been led to think seriously of money as filthy lucre, the root of all evil, a topic to be mentioned only in suppressed whispers, and with guilty laughter, a motive whose acknowledgment was a confession of turpitude. What would be likely to happen when his ambitions came to depend upon his economic competence, or if he had a good chance to win the million dollars or something worth a great deal more? Would he have a firm grasp on his opportunity? Would he make a sound investment of his fortune? Would he be likely to spend the income from it wisely? It is thus particularly important that those who are responsible for the formation of character in others should withstand every impulse to dissemble personal difficulties or mistakes of adaptation in their lives, and should openly appreciate the active, tangible and concretely serviceable ideals that are likely to bring the best adjustments to life in the normal personalities under their influence. The course to an adequate mental adaptation is sometimes stormy, but it is far less devious than the paths by which people attempt to escape it. In the broadest sense it might be expressed as the feeling of being an influence for good. It will be most potent where its results are the most clearly seen, and are the nearest to one. This is of course implicit in the erotic trends. The quest of material possessions, which is the human equivalent of the animal's search for food, is again most valuable where those possessions are made a means of service, and the same is true of the entire group of processes that dynamic psychology sums up under the head of "balancing material." It is sometimes thought that the entire concept of effectiveness for good in others has its supreme value for human adaptation precisely because of analogies, more or less remote, to fundamental trends of love.

Most principles of mental adaptation that can be founded on human experience will have more fruitful results the earlier in the life of the individual they can be brought to bear. Oliver Wendell Holmes remarked that the education of a man should begin with his grandfather; eugenics has become a catch-word, and the paramountness of heredity will always be a favored belief with those who must make of fatalism a rationalization for do-nothingness. But there is a better practical prospect of getting people to do the best for children that they have, than for persuading them about having them.

I am convinced that the worst effects of bad heredity often come from the fact that it also means a bad home environment for the child. The hand that rocks the cradle can also plant the seeds of failure and neurosis. They do not necessarily spring from a bad heredity, and they may come upon a good heredity, where for some special reason the environment is bad. A young man for example, is born of healthy, energetic rustic stock, but his parents by their very energetic zeal for his comfort prevent the development of independent capacity, so that today he is a good-for-naught, wrecked by the very influences that should have been the first to guide him aright. A girl received conspicuous attentions from a young fellow of entire social and economic fitness. He failed, however, because he lacked one quality, which set every other virtue at naught, and without which man has no success in love that is worth having—leadership. This is perfectly accounted for by the fact that the conditions of his upbringing involved an elderly easy-going father, with a young, strong-willed stepmother, whose ascendancy over both the father and son gave the latter no sense of the dominant rôle that he would be expected to assume in such a relationship. In brighter semblance, a girl was born into circumstances that were distinctly ominous, but in whose home the danger was realized and acted upon; with the result that late adolescence finds her clever, accomplished, efficient, and with no lack of others who know it.

We can assume that no parents would knowingly injure the mental health of their children, yet there is a singular blindness in this that is more than mere lack of judgment. The parents who spoil their child do so in feeding their own self-admiration as parents of that child. If unbounded affection for the child often results in such harm to him it is because his adaptation to life is not the underlying motive of the affection of his parents, to whom he is essentially an instrument for the living out of a particular group of feelings. They betray him to their own self-love.

I at once acquired a great respect for a boy of six, who, when asked by his grandmother if he was not sorry she had hurt her foot, replied he had tried to be, but he couldn't. There is no easier way to damage a child's character than by artificially stimulating his emotions. It is an evil turn to a child and an all too frequent one, to teach or allow him to lash himself into emotion, because it appears the "right way to feel." If we try to act the way we feel, we are very apt to act only in some way we think we would like to feel; it is more honest to judge our feelings by the way we react.

The emotional display of sympathy, in particular, is a thing that is blessed neither to give nor to receive. Those who ridicule our sufferings are better friends to us than those who merely pity them. The underlying cause of such displays in us is that it is easier to cry over our friend's hurt than to mend it, and it injures the recipient by undermining his self-control and leading him to exaggerate his difficulties. Though it is hard in the case of those personally dear to us, it is best to confine one's appreciation of another's suffering, so far as is humanly possible, to doing something objective to brighten it.

Just as that education is of little constructive value which teaches merely *what* without showing *how*, so in the breaking up of harmful tendencies the value of education consists in showing not only what to avoid, but how to avoid it. If a drinker is really to give up alcohol, he must not content himself with a great show of repentance, resolution, and pledges, so making a frontal attack with his weakened will upon the strongest temptation his character knows. He must make an honest study of his failing, observe the conditions, the situations, the personal associations under which he tends to yield to it, and strive in every way so to order his life that he will not be subjected to those conditions, and thus outflank his enemy and take him in the rear, where he is least prepared for attack. The most effective and the most sincere way to get rid of any reaction is to avoid the stimulus.

The education that I would carry out would be guided by the motto, "not things to know, but things to do." I would get along with the irreducible minimum of what was not put to the test of immediate action. I would use to the full the opportunity of the early years to develop motor accomplishments that are of proved value in subsequent life. The available forms of manual training would have a high place. To a child who was pointed for anything but a laboring-career, I would make shorthand and typewriting co-ordinate with the three r's. I would provide a boy with some physical attainment of the combative type, as a discipline for temper, and against whatever situations may demand from him the courage of hostile strength. I would always include swimming not simply through its value in self-preservation, but for the discipline of one's reflexes that it tests and develops. Dancing would also have an unquestioned place for the development of the social graces incident to it, and to pave the way for the growth of a healthy sex-consciousness later on.

The healthier the household, the healthier the standards of conduct that are likely to develop naturally. But the individual cannot know enough of life to prepare himself intelligently for his adaptations to it in the period when the formation and training of those adaptations must take place or begin. This is the responsibility of those who are going before. They must see to it that the actualities of life burn out all tendencies, however disguised, to self-love and self-consciousness—different names for the same fundamental thing, which are the great fountainhead of mental mal-adaptations. They must hold the earlier years firmly to the satisfactions of concrete endeavor, of external result, and train these years to strive in their life for none but those constructive ideals and values of which older experience—be it that of success or failure—has brought the understanding. Great mistakes are still retrieved by keeping others from making them; and great triumphs perfected by spurring others beyond them.

The desire of Jupiter for the nymph Thetis was dispelled by the knowledge that she should bear a son who would surpass his father. Better men than Jupiter are needed to fulfill such a prophecy; and no good man might ask more from life than that of which the ruler of Olympus was afraid—to rear children who shall be better than himself.

ORGANIZED WORK IN MENTAL HYGIENE

CLIFFORD W. BEERS

Secretary of The National Committee for Mental Hygiene

ORGANIZED work in mental hygiene may be described in various ways, depending upon one's viewpoint and special interest. My viewpoint is that of the layman; my special interest that of one whose privilege it was to plan and organize, with the help of many representative men and women, the first national and state agencies of their kind, namely, the National Committee and the Connecticut Society for Mental Hygiene. Though my original plan, as presented in 1908 in the first edition of my autobiography, "A Mind That Found Itself," was to create a type of social agency that should work exclusively for the insane and for the prevention of mental diseases, I builded better than I knew. In striving to help the insane and to conserve mental health, the National Committee soon found itself called upon to help also the mentally deficient, the epileptic, the inebriate—in fact all of the mentally abnormal groups.

When one considers the great groups of people who will be benefited, in one way or another, by organized work in mental hygiene, the importance of the movement at once becomes apparent. The two chief groups are the insane, of whom over two hundred thousand are already in institutions and tens of thousands still outside of them, and the mentally deficient or, as they are more commonly called, the feeble-minded, of whom only a few thousands are as yet cared for in institutions while uncounted thousands are still at liberty, a menace oftentimes to the communities in which they live. Next in importance, numerically, are the thousands of people addicted to the excessive use of alcohol and demoralizing drugs; and the epileptic, the exact number of whom cannot in the absence of reliable statistics be stated. To these may be added that numerous group of people who are unable so to adjust themselves to their environment as to live happy and efficient lives. Regardless of how we measure the problem of mental health, or of mental ill-health as it might for present purposes more appropriately be termed, it is without question one of the vitally important problems of the day.

Can this admittedly complex problem be attacked and is there hope of resolving it into manageable factors, were questions often asked in the beginning. Eight years of work has demonstrated that the problem can be attacked with success. The growth of State Societies for Mental Hygiene, as shown by the map on the following page, may be cited. These societies have been organized in response to a spontaneous demand for them within the states indicated. In addition to the fifteen societies already organized, groups in several other states are nearly ready to establish such agencies. Before many years every state in the Union will, without doubt, have its Society for Mental Hygiene.

Briefly stated, the chief purposes of any society or committee for mental hygiene are: To work for the conservation of mental health; for the prevention of nervous and mental disorders and mental deficiency; and for improvement in the care and treatment of those suffering from any of these disorders.

Though methods of work and the amount of attention given to some activities vary, all Societies for Mental Hygiene are seeking to achieve their aims in the following ways:*

(a) By means of campaigns of education;
(b) Social service;
(c) Surveys and special studies;
(d) Legislation;
(e) Co-operation with other agencies.

The first object in view when work was begun was to cause the public to give heed to the problem of mental hygiene. It was rightly believed that the widespread lack of interest in the subject was largely due to ignorance of the many surprising facts already available. The National Committee, therefore, prepared a Mental Hygiene Exhibit, the first comprehensive one of its kind ever created, consisting of charts relating to the insane, feeble-minded, alcoholic and other mentally abnormal groups. So unique was this exhibit that many wondered, when they first heard of it, how facts relating to mental hygiene could be presented in graphic form. The charts themselves, however, soon dispelled doubt. For instance, it was a revelation to the uninformed to read charts containing such statements as the following:

"When the last federal census was taken on January 1, 1910, the number of patients (187,791) in hospitals for the insane in the United States exceeded the number of students in colleges and universities and

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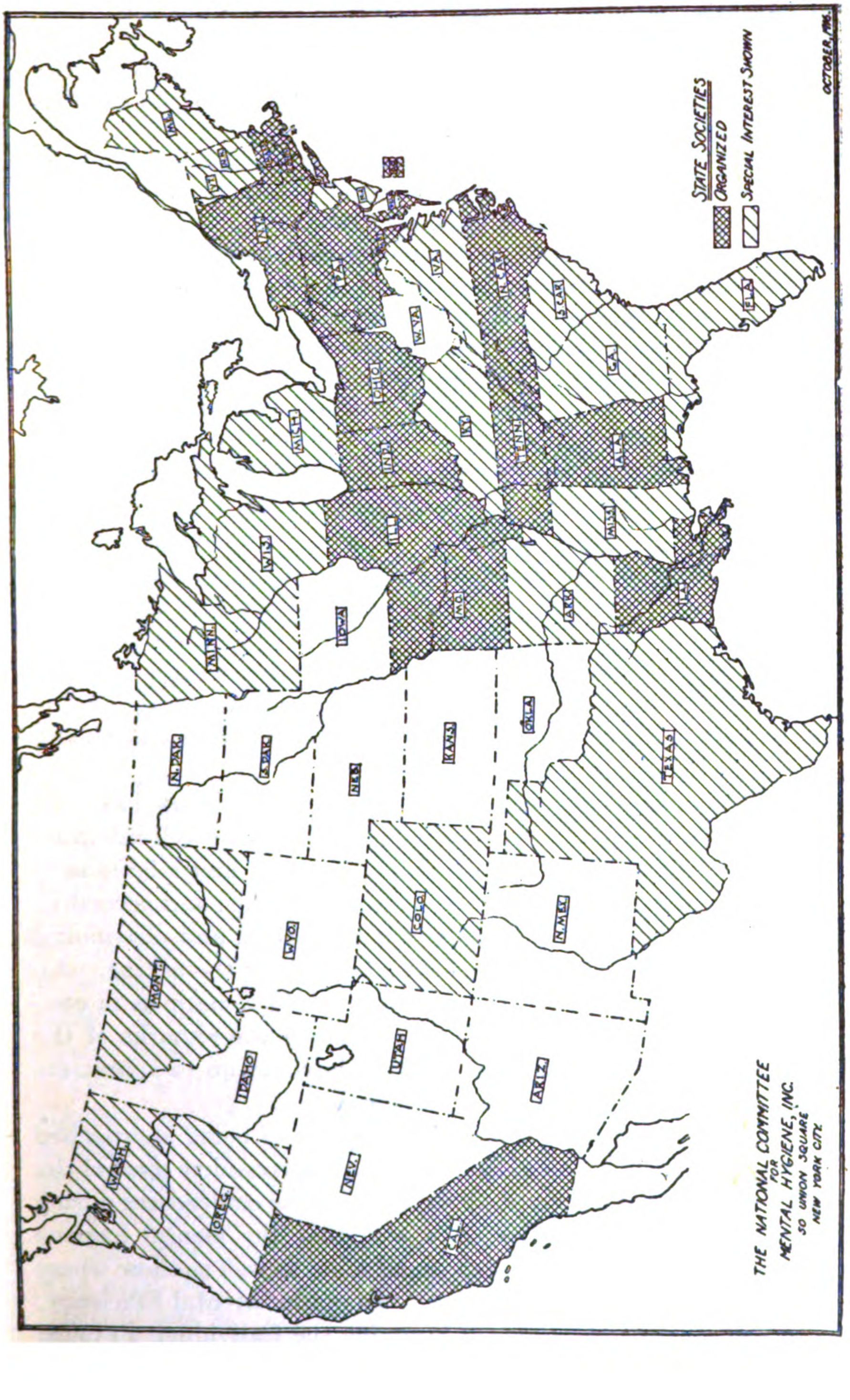
* It is impossible in this article to describe in detail the work of the several state societies. Pamphlets and reports, however, in which their work and that of the National Committee is described, may be had for the asking by all who write to the National Committee for Mental Hygiene, 50 Union Square, New York.


STATE SOCIETIES
▩ ORGANIZED
▨ SPECIAL INTEREST SHOWN
OCTOBER, 1916.
THE NATIONAL COMMITTEE FOR MENTAL HYGIENE, INC.
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KANS.
OKLA.
TEXAS
MONT.
WYO.
COLO.
N.MEX.
IDAHO
UTAH
ARIZ.
WASH.
OREG.
NEV.
CAL.

exceeded also the number of enlisted officers and men in the U. S. Army, Navy and Marine Corps.

"If all states should provide for their insane as adequately as do New York and Massachusetts, more than 300,000, instead of 187,791 patients, would have been in institutions on January 1, 1910.

"About 30,000 new cases of mental disease are admitted to institutions each year in the United States. The annual increase in the number of patients under treatment averages about 6,000.

"The annual cost of caring for the insane exceeds $30,000,000. Nearly one-fourth of the total annual expenditures of a state caring adequately for its insane is expended for their maintenance.

"About 20 per cent of all patients committed to hospitals for the insane recover and remain well; and an added 20 per cent recover sufficiently to return home where, under intelligent supervision, many are able again to become self-supporting and useful members of society.

"About 40 per cent of all cases of mental disorder are preventable."

It seems not amiss to say that the National Committee has given out only dependable facts. This conservative policy was signally recognized by the Jury of Awards at the Panama-Pacific Exposition, when it gave to the National Committee the highest of awards for its Mental Hygiene Exhibit. The facts gathered in preparing the mental hygiene exhibit and a wealth of other information collected by the National Committee are serving as the basis for its educational work and for the campaigns now being carried on by so many of the State Societies.

An interesting development in the educational work has been the rapid growth in the demand for physicians and well-informed laymen to deliver addresses on mental hygiene and related subjects at public meetings. In response to this demand several of the Societies for Mental Hygiene have prepared and distributed lists of lecturers whose services may be had for the asking. An important by-product of these meetings, held sometimes in connection with exhibits, is the publicity given the remarks of the speakers by newspapers which, at last, have begun to appreciate that mental hygiene as a topic has news value.

That mental hygiene is a subject capable of being approached from many angles becomes evident when one considers some of the titles of addresses delivered at mental hygiene conferences during recent years. These titles show also that the mental hygiene movement is to benefit those of sound mind as well as those whose minds are disordered or defective. To quote: Mental Efficiency; Self-Management; Methods of Studying the Individual; Physical Health and Mental Efficiency; Sexual Life of Childhood and Its

Possible Bearing on Mental Health; Protecting the Mental Health of the Growing Child; Relation of Mental Hygiene to Teaching; Our Obligations to Understand the Workings of Our Own Minds; What Psychiatry Teaches Concerning Educational Methods; Special Classes for Backward Children; Day-Dreams and Thinking; Value of Discipline in Education; Value of Physical Education in the Stabilization of the Mind and Nervous System; Practical Eugenics; Mental Hygiene in Public Health Work; What Societies for Mental Hygiene Ought to Do for Children; Care of the Feeble-Minded; Segregation of the Feeble-Minded; Problem of the Delinquent Girl; History, Treatment and After-Care of the Delinquent Boy; Feeble-Mindedness and Crime; Care and Treatment of Dependent Epileptics; Preventable Mental Disorders and How to Prevent Them; Early Manifestations of Mental Disorder; After-Care of Mental Patients; Social Service for the Mentally Ill; Modern Treatment of Mental Diseases; Some Popular Misconceptions Regarding Insanity; Relation of Insanity to Criminality; Inebriety and How to Control It; Prostitution in Relation to Insanity and Feeble-Mindedness; Heredity in Relation to Insanity and Eugenics. This summary of topics relating to mental hygiene may well serve as a forecast of the articles that will be published in this quarterly magazine.

As was to be expected, the campaign of education inaugurated by the National Committee and its affiliated State Societies and Committees caused hundreds of individuals to appeal to these agencies for advice and assistance—people, for the most part, who had long been wanting such help but knew of no way to secure it. These requests made it necessary to inaugurate social service work in behalf of the insane, their worried relatives and those seemingly in danger of developing mental disorder; also in behalf of the feeble-minded and their relatives including, of course, persons not members of these special groups.

There is no better way of showing how a Society for Mental Hygiene can aid individuals than by indicating some of the kinds of cases that can be helped. To quote a paragraph written by Miss V. M. Macdonald, Secretary and Social Worker of the Connecticut Society for Mental Hygiene:

"The cases vary in type. There is the demented Swedish cook who must be returned to her own country; the patient whose husband has not known how to get her into a state hospital; the young Hungarian girl, on the brink of a mental breakdown, whose work and recreation must be regulated; the distressed family who must be shown that it is right to send the daughter away to a hospital; the recovered patient who must be placed at suitable work; the wife who knows that something is wrong with her husband's mind but cannot decide what to do about it; the young student who knows he is near the breaking point but does not want to give up his studies; the Italian girl in deep mental distress over an unfortunate love affair; the man who is haunted by fears of inherited mental weakness; and the man who has exhausted his means in keeping his wife in a private hospital because of unfounded prejudices against state hospitals. No two cases are alike, but all show that mental disease is an overwhelming affliction which the ordinary experience of life does not train one to meet. Some of this work for individuals is done by visiting the homes, some by consultation at the office of the society, some by correspondence, some by visits to the mental hygiene clinic established by the society in co-operation with physicians connected with the state hospitals."

Surveys of the public care of the insane and feeble-minded are rapidly becoming an important part of the work of the National Committee and its affiliated State Societies. What is meant by such a survey is indicated in Dr. Salmon's article: "The Insane in a County Poor Farm," published in this issue of "Mental Hygiene," which is to form part of a report of a state survey. The Rockefeller Foundation has already donated over $25,000 to the National Committee for use in making surveys of conditions among the insane, the plan being that conditions in all states shall eventually be reported upon. Already, surveys have been completed or are under way in two cities, Chicago and New York, and in the following states: California, Colorado, Connecticut, Georgia, Louisiana, Pennsylvania, South Carolina, Tennessee, Texas, and Wisconsin; and many other surveys are soon to be begun.

Such surveys are made without expense to those desiring them. All that is required is that an invitation to make them be extended to the National Committee by the proper authorities. That invitations are being sent to it by governors, state boards and commissions and by state hospital officials—also by county and local officials—is proof in itself that the survey method, namely, the study of conditions by a psychiatrist working under the direction of the National Committee for Mental Hygiene, is destined to render obsolete the so-called legislative investigation and "investigation" by sensational newspapers. Surveys on feeble-mindedness and special studies on the mental factors in crime are also being made by the National Committee under special grants from the Rockefeller Foundation, which phases of the work are second to none in importance.

As permanent improvement in the methods of caring for the insane, feeble-minded, epileptic and inebriate can be made only in those states where intelligent legislation is enacted in their behalf, no activity of a State Society for Mental Hygiene can be of greater importance than its legislative work. In the past the interests of these groups have not always been advanced in proportion to the needs, simply because, in most states, there has been no permanent agency to act as their champion before the legislature. All this is now changed in many states, for such Societies for Mental Hygiene as are at work are managed by groups of representative citizens who, when they introduce or support legislative measures, can and do insist upon prompt and intelligent action. If space permitted, it would be possible to show how several of the existing Societies for Mental Hygiene have already been the determining factors in the securing of liberal appropriations and the enactment of wise and humane laws in behalf of the special groups whose interests these societies are under obligation to protect.

In conclusion, a word about co-operation. One test of the value of any given form of social agency is the frequency with which it is asked for advice or assistance by other social agencies. Judged in this way, the Society for Mental Hygiene becomes an indispensable part of any state's scheme of social betterment. There are few organizations, especially those engaged in helping individuals, which during the year are not confronted by problems that can only be solved by a person experienced in mental hygiene work. Just as the operations of one's mind color the life of the individual, so does the problem of mental health color many other problems. In consequence, Societies for Mental Hygiene are called upon for help by scores of other charitable organizations, by state and local boards and by individuals, such as judges, charity officials, health and police officers, social workers, physicians, lawyers, clergymen and teachers. Work already accomplished makes it safe to say that no state may consider itself socially well organized unless a Society for Mental Hygiene is included in its list of social agencies. Is it not a fair question to ask whether such a society is at work in your state?

WHAT THE STATE HOSPITAL CAN DO IN MENTAL HYGIENE*

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THE best, and in most of the states the only organized agency for dealing medically with mental disorders is the state hospital. Outside the walls of such institutions the field of psychiatry is practically a neglected waste. Organized provisions for dealing with mental disorders differ little if any from those employed in the management of behavior disorders generally, and society seems oblivious to the advantages and necessity of providing intelligently for the special needs of persons suffering from this group of diseases. To an informed observer, it seems remarkable that in dealing with the personal and social difficulties occasioned by these disorders, so little use is made of the special knowledge and skill which have been gained from their medical study. Outside the hospitals, skilled workers are extremely few in number, and it is said that in some states not a single specially qualified physician can be found to whom a mental case may be referred for advice and treatment. It is deplorable, too, to note the extent to which this situation is, through ignorance, accepted by the medical profession as well as by society generally, without protest or effort at correction.

That special knowledge and expert advice and treatment may be of value in other forms and degrees of mental disorder than those which completely incapacitate the individual for self protection and social adjustments, is a thought which has not yet taken a firm hold in the social consciousness. The state hospital is still regarded merely as one of the resources which have been provided to enable the social body to relieve itself of objectionable members, and the interest and support given it are too often based on this view. The special knowledge and skill which, in most places, are considered indispensable to its proper management are looked upon as peculiar to the requirements of institutional treatment, and not at all essential in the treatment of the individual before he is given access to it or after he is discharged. Even the discharge, whole and in their right minds, of a large proportion of the patients admitted to the hospitals has failed to convey to the public or even to the medical profession a belief in the value of the application of equal knowledge and skill to the early stages and less incapacitating forms of mental disorders or to the conditions out of which they originate. A striking contrast prevails between the intra-hospital and the extra-hospital knowledge and methods. There is, in consequence, little or no co-operation between the hospital and possible or actual outside agencies, or between the hospital and the outside physicians, and the standards and methods differ so widely that no continuity of effort can be brought to bear on the study and treatment of the cases or on the problems of prevention and of anticipation of consequences.

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*Read at the seventy-second annual meeting of the American Medico-Psychological Association, New Orleans, La., April 4–7, 1916.

While the conditions outlined prevail in many, perhaps in most of the states, in a few the advantages of a wider application of psychiatric knowledge and skill are beginning to be realized, and practical steps have been taken towards extending the activities of the state hospitals, and towards improving other existing agencies for psychiatric work and establishing new ones. This tendency is fostered, and to some extent has been created, by the organized agencies which have been established for the advancement of mental hygiene, the principal of which is the National Committee for Mental Hygiene. The fundamental aim of the mental hygiene movement is to spread abroad the knowledge which has been gained in the medical study of mental disorders, and to promote in every way possible, its effective application in dealing with the problems occasioned by these disorders in the individual and in the social body as well as in hospital work.

In the work which has been undertaken in the various states and municipalities, the state hospital is the best and frequently the only existing organized agency which can be utilized, and no other is so important or so capable of immediate and permanent usefulness. The special knowledge, judgment, and interest which are essential to the proper direction and conduct of the work are possessed principally, and in some places solely, by the state hospital physicians. Without their co-operation and participation, a properly organized effort can scarcely be undertaken, and the advice, guidance, and active direction of psychiatrists are constantly needed in the educational and constructive activities in which the mental hygiene organizations engage. In the states where mental hygiene work has been undertaken, the state hospital managers and physicians have, by furnishing lecturers, by preparing and distributing literature, by providing material for exhibits, by aiding in surveys, by becoming members of committees and societies, and by aiding in obtaining popular or governmental support for objects aimed at, rendered invaluable service. Experience shows that this kind of aid may be confidently expected.

It is, however, by extending the activities of the hospital itself beyond the present limits, so as to deal with mental disorders in closer relation with the conditions in which they arise and in which they interfere with the social welfare, that the state hospital, as an organized agency, can contribute most to the advancement of the aims of the mental hygiene movement. By this extension, the knowledge and skill which have been acquired in the study and treatment of patients in the hospitals can be brought to bear on the problem of mental disorders as it exists in the home, in society, and in the individual in his natural environment. The widely prevalent view that the study and practice of psychiatry, and that hospital organizations can be of service only in hopeless conditions will thus be dispelled and their value in individual and social conditions which are remediable will be practically demonstrated and accepted. This result has already been in some measure accomplished, and an increasing respect and demand for the services and advice of psychiatrists are distinctly noticeable.

The manner of finding entrance to the broader field of usefulness which is opening for the state hospital will vary with the standards reached in the work for mental disorders in each state and in each hospital. Unfortunately, these standards vary widely. There are still some states in which even the simplest principles and methods of intelligent humane care have not yet found full acceptance and application, and persons suffering from mental disorders are permitted to languish in misery and neglect in jails and poorhouses. In others, realization of the necessity and advantages of hospital provision has been reached, but there is no clear conception of the special character of the medical and nursing attention which is indispensable to the proper study and treatment of the patients, and political and personal considerations are permitted to impair fatally the quality of service rendered. In still other states, the hospitals have reached a high state of efficiency, and in still others a centralized state system has been organized for shaping and supervising the provision and methods of dealing with mental disorders both within and without the hospitals. Present indications are that such a system will eventually be established in every state, and our aim should be to see that it is organized on a capable, expert footing.

Whatever the system or standards may be, however, they are likely to be improved by extension work. In the states in which the standards are low, a rapidity of progress far beyond what has previously been possible may be accomplished by means of the educational and constructive activities of the mental hygiene agencies. The best starting point for extension work is, undoubtedly, *the thorough study of the patients under treatment in the hospitals.* It was pointed out by Dr. Meyer in 1906, at the inauguration of an after-care system in New York State, that "through the demand for a thorough study of each case the hospital physicians were confronted over and over again with the need of accurate knowledge of the constellation in which the patient came to grief. This quite naturally led to an attempt to visit the home or to have it visited by some one who knew what was wanted." A great deal, he said, had been done to give a more and more concrete form to the interest of the hospital physicians in the families and environment of the patients. Similarly, when the question of the discharge of a patient was considered, knowledge of the environment to which the patient would return placed the physicians in a much more responsible and helpful position. In many of the states, the only place where persons suffering from mental disorder are studied is the state hospital. It is of special importance, therefore, that the work should be well done. Knowledge begets interest, and interest begets activity. Pessimism concerning mental disorders is not found among those who study the patients scientifically. There is no better test of the quality of a state hospital than the knowledge and interest in the individual patients which are manifested by the hospital physicians. Interest in the plant and equipment and in the live stock on the farm may be commendable but when it supersedes an active interest in the patients and a sound knowledge of their condition and needs, there must surely be something wrong.

To the physicians who faithfully study and treat the patients in the hospital, it always seems unsatisfactory and unwise to cut them off at their discharge from the knowledge and ability to help which have been applied during their stay. Frequently, the hospital physicians alone are in a position to supply the special knowledge and skill which may be required to guard against relapse and to aid the patient in readjustments to domestic and social relations. Considerations of this kind have led to the introduction of methods of keeping patients under supervision and exercising some influence in shaping their lives after they have left the hospital. The parole system, the boarding-out system, the after-care system, and more recently the social service and out-patient developments have been undertaken with these among the objects aimed at. The employment of social service nurses to aid in the readjustment of patients after their discharge has been introduced quite extensively in Massachusetts and New York. Most of the state hospitals in these states are furnished with these nurses and the work they are already doing in some places is quite impressive. In Massachusetts during a period of three months the number of visits made by the social service nurses was 2,516. The educational value alone of bringing into close relation with the homes of the patients, and with the communities, persons who possess knowledge and skill concerning mental disorders can hardly fail to be useful. Individuals and families with psychopathic tendencies are brought under observation and the way to preventive work may be opened. The knowledge of defects in local provision and methods for dealing with mental cases which is gained by these nurses, may also be of value in bringing about improvements. For twenty years, in New York State, it has been customary to send nurses for the patients committed to the state hospitals. This was perhaps the most helpful among the less conspicuous benefits of state care of the insane. These nurses, by their methods, wherever they go present an object lesson in the proper treatment of persons suffering from mental disorder. They also obtain information concerning the local provision and methods of furnishing temporary care for mental cases, and a few years ago the information thus obtained made it possible to secure legislation by which medical responsibility and methods were substituted for the police system which had previously prevailed.

The out-patient clinics for mental cases which have recently been established in connection with a number of state hospitals serve the double purpose of providing means for continuing the medical observation and treatment of patients who have left the hospital, and of giving mental cases that have not been in the hospital access to the special knowledge and skill which they require. Thirteen of these out-patient clinics have been opened in New York State, and state hospital physicians, in some instances, furnish medical service for clinics connected with medical schools. Nearly, if not all, the Massachusetts hospitals conduct out-patient clinics, that at the Psychopathic Hospital in Boston being by far the largest. The number of visits made to the Massachusetts clinics during a period of three months was 2676. A large proportion of those who attended had not been state hospital patients, and 125 were children who were sent to the clinics from the schools. The advantage of giving these cases access to psychiatric knowledge and advice must be apparent. It has been found in New York that by circularizing and notifying other social agencies the clinics can be readily built up. On the first day, at a clinic recently opened in Brooklyn, eighty patients applied for treatment. The clinics are not always or solely conducted at the hospitals, but are at convenient locations in the hospital district. One of the practical results which may be accomplished by means of out-patient clinics was illustrated at White Plains, New York, where, within a year after the physicians of Bloomingdale Hospital began to examine the children in the schools, an ungraded class in charge of a specially qualified teacher was organized by the school board. The work of the clinics takes the time and attention of the hospital physicians, but the hospital gains from the larger outlook and interest. Access to different material from that furnished by the hospital, and the opportunity afforded for a more complete study of discharged hospital cases are appreciated by the physicians, and none who begin wish to discontinue. Nearly every new feature of hospital work has been started without much support and the comparatively small cost of social service workers and out-patient clinics will, when their value as a means of reducing the necessity of prolonged hospital care is shown, render it comparatively easy to obtain special support for them.

Attendance at out-patient clinics brings the hospital physicians into contact with the general medical practitioners in a way that is mutually helpful. The latter have an opportunity to see the psychiatrists at work on cases with which the practitioner is familiar, and any help given increases his interest and respect for psychiatry as well as his inclination and ability to support the hospital. This has a distinct educational value which may be enhanced by occasional talks to physicians invited to meet for the purpose or at meetings of the medical societies. Medical meetings may also be held at the hospitals. Talks to teachers whose pupils have been examined at the clinic and to parents may also be given to advantage. The mental hygiene organizations also look to the hospital physicians to make addresses. This method of spreading abroad knowledge concerning mental disorders is employed quite extensively in Massachusetts and New York, and possibly in other states concerning which I am not so well informed. In Massachusetts during a period of three months, thirty-three talks and addresses to small and large audiences were given by the state hospital physicians. In New York, nearly all the lecturers listed by the mental hygiene committee are hospital physicians. Useful activity of this kind outside the hospital not only brings relief to many sufferers, but aids in creating among the people of the state a feeling of confidence in the state hospitals, and in establishing understanding and respect for the work in which the hospital physicians are engaged.

The present indications are that hospital extension work will ere long be generally regarded as a definite part of every well organized state system of dealing with mental disorders. Society is beginning to find out that what has been learned in the medical study of these disorders may be made useful in dealing with difficulties which have heretofore been considered outside the range of psychiatric knowledge and activity. It has long been realized by psychiatrists that this knowledge might advantageously serve a wider field than that of hospital treatment. The difficulty has been to have it accepted and applied. Now society is beginning to reach for it and is ready to co-operate in applying it. There are even indications that the field is growing more rapidly than the number of qualified workers, and unless psychiatrists co-operate or lead there is some danger that plans may be shaped and work undertaken without the wise guidance and skilled attention which are needed. The state hospital and its workers can no longer remain as isolated from general medical and social interests and activities as in the past. Their responsibilities and opportunities are becoming more and more clearly defined. As Dr. Meyer has suggested, their usefulness can be much increased by assuming some responsibility for the psychiatric standards of the district in which the hospital is located. The hospital can be a live center of psychiatric knowledge and influence. It can develop its facilities and methods with a view, not only of providing care and treatment for patients who may be brought to it, but of establishing active relations with the different parts of the district. It can in this way do much to dispel ignorance and to establish better methods of dealing with mental disorders as they appear in the homes, in the schools, in the courts, and in the social body generally. This development in hospital work is already in progress. Its value is so apparent that it must go on and eventually it will bring the hospitals, and the state systems of dealing with mental disorders of which they are a part, fully into the field of mental hygiene.

THE SUBNORMAL CHILD—A SURVEY OF THE SCHOOL POPULATION IN THE LOCUST POINT DISTRICT OF BALTIMORE*

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A PSYCHIATRIC dispensary has few problems more important than those presented by the children who are brought there for treatment. These children may be divided into two large groups: the first includes those who may roughly be called neurotic children, the second those children who present conditions of mental defect. The neurotic children show a great variety of symptoms, which call for the detailed study of the individual child and of the home environment; their treatment usually requires the regulation of the home hygiene. In order that this may be done, trained social workers are frequently essential; otherwise ignorance, indifference and the force of habit lead to the neglect of medical advice. The situation is similar to that in cases of tuberculosis, where unless the visiting nurse gives practical help in establishing better habits of hygiene the advice of the physician may lead to no practical steps. This extension of the range of help, due to the more adequate conception of medical responsibility, not only benefits the individual patient, but safeguards the community from the spread of the infection. The provision of the necessary workers is sound economy.

The treatment of the neurotic children does not necessarily involve more than the study and readjustment of the individual patient and the home environment; it is true that an urgent plea† has been made for the establishment of special educational provision for many of those children, for whom the usual school environment is held to be quite detrimental, while their demands are not met by grouping them with those who suffer from mental defect.

The second group, that of the subnormal children, raises issues which go beyond the more individual problems of the neurotic child.

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*The survey was made possible through the generosity of Mr. Henry Phipps, who in 1913 made a special gift for the purpose.

†ZIEHEN, TH. *Die Erkennung der psychopathischen Konstitutionen (krankhaften seelischen Veranlagungen) und die öffentliche Fürsorge für psychopathisch veranlagte Kinder.* Berlin: Karger, 1912.

In the case of the subnormal child the personal hygiene and that of the home must be supplemented by a school training adapted to his special needs; without suitable school opportunities no adequate solution of the problem of the subnormal child is possible. While the neurotic child may be able to make use of the same curriculum as his more stable comrades, the subnormal child with his constitutional limitations is quite unable to do so. He suffers from the lack of a suitable school environment and upon his constitutional limitations there may be grafted undesirable traits, which a wiser education might have prevented. Education should aim at the best training for the adult tasks, and the type of training which is best for the prospective self-supporting citizen is not necessarily suitable for those whose limitations will prevent them from ever being quite independent and from taking up the full responsibilities of citizenship.

In relation to the subnormal child the physician may give advice as to the necessary conditions for his school training, but this advice is of little use if the requisite school opportunities do not exist. With the aid of the social service department he may be in a position to reorganize the hygiene of the home, but individual workers cannot create a school organization. For the creation of the necessary school organization one must depend upon the co-operation of the community in general, upon its realization of the importance of the problem, upon its intelligence and earnestness in dealing with it.

The actual number of subnormal children among the school population is much greater than is generally recognized; they seriously hamper the education of the normal children. These subnormal children later recruit the ranks of those dependent upon society, and are apt to be found among the vagrants, the paupers, the alcoholic, the prostitutes and the delinquent. It is not yet sufficiently realized that "*mental defect forms the largest single cause of delinquency* to be found by correlating tendency to offend with characteristics of the offender."[*] It is obviously in the best interest of the normal child, and of the normal adult that this problem of the subnormal child should be dealt with in a sound manner.

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[*] Healy, William. *The Individual Delinquent*, p. 447.

Vide Goring, Charles. *The English Convict, A Statistical Study*, p. 260. "It is clear that the relationship between mental defectiveness and the committing of all types of crime, with the exception of some kinds of fraud, is an extremely intimate one . . . it is evident that defective intelligence is one of the primal sources of crime in this country."

The community which would equip modern hospitals for the treatment of its typhoid patients, but neglect completely its water supply, would show little judgment; but it is no more intelligent nor economical to lay all the emphasis on the organization of reformatories, almshouses, foundling asylums, jails, etc., while neglecting the school training of the subnormal child. In the case of an unsanitary water supply and typhoid fever, a timely epidemic with its attendant expense and loss of life serves to awaken the community from its indifference; unfortunately no such dramatic episode can be relied on to awaken the community to a sense of the insidious and far-reaching results of the failure to give the subnormal children in the community appropriate training during the school period, and to make adequate provision for them.

To deal adequately with the whole situation is an enormous task; few communities have even taken steps to get the necessary data for estimating its exact extent.

The present survey is one step in the direction of getting the relevant data for the city of Baltimore. The aim of the survey was to make a careful census of the children of school age in some one district, to find out how many children were subnormal and to determine approximately the degree of the constitutional defect of these subnormal children.

The District Covered by the Survey

For the purpose of the survey, part of the Locust Point district was chosen; it furnished an area of manageable size, strictly delimited, and in which the hearty co-operation of the school authorities was guaranteed. Locust Point cannot claim to be a typical district of Baltimore, and the data collected from this district have to be considered in connection with the social and economic conditions of the district. On the other hand there are few of the larger American cities without districts which present similar conditions, and the figures collected from this district, although not to be used as a definite unit of measurement for the whole of any city, have an independent value of their own. Taken in conjunction with the later survey of other districts they should be of use for the approximate determination of the number of children with special requirements in the whole city.

In the report of the College Settlement Association for 1911 the following description is given of the Locust Point District:

"The section of Baltimore known as Locust Point is a long, narrow tongue of land jutting out between two branches of the Patapsco River. Although the Point can be reached in twenty minutes by electric car from the center of the city its peculiar geographical position creates many of the problems found in isolated communities, without freeing the district from the larger municipal problems that today confront the city of Baltimore. . . . Large tracts of waste land give a sense of wide, free spaces and elbow-room for everybody; but, as a matter of fact, the population of the Point . . . is crowded into uniformly small houses, where the large families suffer all the bad results of congested living. . . .

"Life at Locust Point is largely colored by industrial conditions. The industries, for the most part, employ cheap, unskilled labor, a fact that keeps the majority of families close to the poverty line, and too often below it. The B. & O. Railroad employs a large number of men in its warehouses and freight yards. Two fertilizer plants fill the air at intervals with the disagreeable odor of sulphuric acid. Pottery, enamel ware, paper bags, furniture, and glass bottles are other products of the Point. There is a large contingent of stevedores, whose work is ill paid and irregular, with long periods of idleness. Two canning factories give seasonal occupation to large groups of women, and also to children who are permitted to work in these factories at twelve years of age. Children much younger are frequently taken from school to serve as unpaid helpers to their mothers and older sisters. Many of the girls who live on the Point and come to the Settlement are employed farther uptown in a tobacco factory, with disastrous results to their health.

"The Roman Catholic and the German Lutheran churches have the largest congregations, but the Congregational and the Episcopal churches are also represented.

"The recreation facilities of the Point are very limited, especially in the winter. During the summer Latrobe Park, almost opposite the Settlement, with its well-equipped playground, open-air gymnasium, athletic field and bath houses, is a great boon to the people, but during the cold weather the wind-swept Park is deserted. Two moving picture shows, one large German dance hall and two Hungarian dance halls, all connected with saloons, represent the organized commercial forms of amusement."

There are thirty saloons in the district. The pottery work referred to in the above report has been shut down for over two years, and this is only one evidence of the industrial decline of the district during that period.

As to the racial composition of the population, in 243 out of the 1,389 families in the district no adequate data were obtained; of the 1,146 families with regard to whom satisfactory data were available, in 523 both parents were of English-speaking races. Only 78 children of the school population had been born abroad.

The population of the district is exclusively white.

*Method of Collecting Data**

The aim of the survey was to make a census of the children of school age, and to estimate each child from the point of view of his adaptation to his environment and of his promise of adult efficiency. As a large number of children had to be covered the estimation of each child had to be summary. The necessity of covering the whole ground in a limited time was also a condition of the work. Early in the summer a large number of children migrate with their parents to the strawberry fields, before the end of the school session; a large number return only after the opening of the winter session, being detained at the canneries. The distribution of the children in the schools is not stationary; a child, who in one school session is in the public school, may in the next session be found in the parochial school. Care has to be taken to avoid counting such children twice. The local situation is apt to change; thus before the survey had been completed the Paret Memorial Kindergarten was given up, and many of its children were distributed in the public and the parochial schools.

The whole district was covered by the house-to-house visits of two field-workers. They were asked to get those data bearing on the condition of the children, which could be gathered easily and to form a crude estimate of the physical and mental hygiene of the home. Such a rapid survey obviously does not permit the worker to gather any data of statistical value bearing on the heredity of the children, but this aspect was not neglected; the mental level of the mother, the industrial efficiency of the father could frequently be noted. The economic status of the home was noted, and those factors which were considered of special importance for the mental hygiene of the child. The home visit enabled one to have an estimate of the individual child from the parent's point of view. The results obtained were fuller than could have been expected in view of the limited time, because the field-workers were already very familiar with the social life of the district and found quick entry into the homes. The co-operation of the community was excellent; in remarkably few cases was there any suspicion or antagonism shown to the field-workers. The fact that the workers introduced themselves as coming in the interest of the children smoothed the way. Their cordial reception in the homes is an example of the valuable opening into the home given by interest in the welfare of the children, a principle which should stimulate us to look on the school system as one of the most direct universal agents for bringing influence to bear on the home life of the community.

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*The home data were collected by Miss S. L. Jean and Mrs. Margaret J. Ware; the school data were obtained by Miss M. W. Moore and Miss M. Pope. I am much indebted to these workers for their painstaking and conscientious work in the collection of the data, and for much help in their tabulation. I am glad also to take this opportunity to acknowledge the courtesy and cordial co-operation of all those connected with the various schools in which the children were examined. The special district was to a large extent chosen because in it Miss Persis K. Miller, principal of Public School 76, was giving an admirable practical example of the extreme importance of the school as a community centre.

The other two workers took up the efficiency of the individual children at school with the valuable aid of the data made available by the school authorities; they reviewed the school progress of the individual child, his grade, the physical condition as recorded by the school physician; they discussed in conference with the teachers the characteristics of the child; more than half of the children were tested by the Binet-Simon intelligence scale (Goddard's modification).

For each child two cards were filled out, one with the record of the results of the school investigation, the other with that of the results of the home investigation. The estimate of the requirements of the individual child was based on the collation of these data. It is well to emphasize this point, as otherwise there might be some misunderstanding. It is true that in all doubtful cases the Binet-Simon intelligence tests were applied, but in no case was the classification of the child based merely upon the result of this part of the total examination.

The Application of the Binet-Simon Intelligence Tests

This standard series of tests was applied at the schools by Miss M. W. Moore, who had worked for two years under Dr. Goddard at Vineland, and who had later spent several months applying intelligence tests to immigrants at Ellis Island. Due regard was paid to the possible influence of difficulty with the language, and on this basis the results of the tests were put aside in fifty-two cases. For the benefit of those not familiar with these tests a brief description of the method may not be out of place. The Binet-Simon scale of intelligence tests consists of a series of tests arranged in groups of ascending difficulty so that each group of five tests can be successfully answered by the average child of a corresponding age; thus there is a group of tests which can be done successfully by the average seven-year-old child, who however is unable to succeed with the following group which is adapted to the more mature powers of the eight-year-old. A child, no matter what his actual (chronological) age, who in this examination is only able to reach the level of the average seven-year-old child, is said to have the "mental age" of seven. Frequently a child who is unable to do successfully any complete group of five questions beyond a certain group is able to do isolated questions in these higher groups. Credit is given for these questions according to the arbitrary rule that, for every five isolated questions answered successfully, an additional year is added to the age corresponding to that group of questions, all of which have been successfully answered. Thus the child who answers successfully all the questions corresponding to the age of seven and although not answering completely all the questions corresponding to the age of eight, still answers ten of the later questions, is awarded two additional years; his "mental age" accordingly is not seven, but nine years. In tabulating the data the age of each child has been given in years and months, while the figure for the "mental age" indicates the exact number of tests answered correctly; thus Robert A., 9:7, B. S. 8^4 indicates that the boy nine years and seven months old has been able to do the tests corresponding to the intelligence level of eight years, and four of the tests above this level.

This scale was first worked out among the children of the working class in Paris, in a certain social and economic atmosphere, where the children had a well-recognized school education. It must not, therefore, be taken as a scale which can at once be applied to a totally different environment, where social, economic and educational conditions are very different. It is, however, striking that this scale is so widely applicable as it is. Goddard, after examining two thousand school pupils in New Jersey, is enthusiastic over the accuracy of the scale.*

His own results, however, as pointed out by Thorndike,† hardly justify the complete satisfaction which he expresses, for the groups of tests, which are supposed to represent the average mentality of children of ten, eleven, and twelve years respectively, in reality correspond to ages slightly more advanced. The results of the present survey show that the standards of the Binet-Simon scale are too severe for a population like that of the Locust Point district. This is shown by the fact that, in the one school where all available pupils were examined without selection, out of the pupils examined 196 showed some "mental retardation," while only six showed any advance ahead of their expected "mental age." If the various groups of tests had corresponded to the real average ability of the various ages, then in view of the usual variation in normal children there would have been a large number slightly above as well as a large number slightly below the average.

The children of the public school were not examined without selection, and so there are no figures available with regard to the total number of children there above and below the average level demanded by this scale. The results of the examination of the children of this district by this scale are, therefore, not to be taken without some interpretation, and in this survey the scale was used merely for the purpose of a preliminary sifting and for greater definition without anything more than a relative value being given to the figures.

The fact that the mental age of a child lags behind its chronological age to a definite extent does not necessarily enable us to forecast accurately the development of that child. Thus the child who at eight only attains the "mental level" of five years, *i. e.*, who shows three years' "retardation," may at twelve show a much greater degree of retardation; on the other hand he might theoretically show less than three years' retardation. At present the necessary experience for formulating an accurate forecast is wanting; when a large group of children, such as those examined during the present survey, shall have been re-examined at intervals of five years, the desired data will be available. It may then be

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*GODDARD, H. H. *Two Thousand Normal Children Measured by the Binet Measuring Scale of Intelligence, Pedagogical Seminary,* 1911, pp. 232–259.

†THORNDIKE, E. H. *The Significance of the Binet Mental Ages, Psychological Clinic,* December, 1914.

possible to forecast more accurately from a definite degree of mental retardation at each age the probable later limitation of the individual's mentality. The most important question to be answered is whether the child will develop mentally to an extent which will enable him to be self-supporting.

The level of intelligence, of course, is not the only condition which determines the ability of an individual to support himself and to keep above the ranks of those dependent upon society; other factors are of great importance, such as the emotional responsiveness and stability of the individual, and his general out-put of energy. Below a certain level of intelligence, however, the individual is bound to become dependent upon the family or the community; and in Baltimore it is probably a very conservative estimate to place this lower limit at the intelligence level corresponding to the "mental age" of nine. It is perhaps possible under exceptional circumstances for an individual with such a modest equipment of intelligence to support himself, if the other factors in his constitution are very favorable.

The group of children whose intelligence may rise up to this level but never develop much further will repay special consideration, for their future career as helpful workers on the one hand or as dependents and delinquents on the other, may depend to a large extent upon the appropriate or inappropriate nature of their school training.

The above statements are commonplaces to those who are brought into contact with the problems of the feeble-minded; both the practical as well as the theoretical aspects of the question are discussed in detail in Dr. Goddard's book in which he presents the material studied at Vineland and the conclusions which he has drawn from its study.*

The actual extent of the problem in the Locust Point district of Baltimore can be seen from the following data.

Census of the Population of the District Surveyed

Total population	6,089
Adults (above 16)	3,513
Children (under 16)	2,576
Children under 6	984
Children over 6	1,502
Age not determined	90

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*GODDARD, H. H. *Feeble-Mindedness, Its Causes and Consequences.* New York, 1914.

Children of school age	1,502
At school	1,281
At home (mostly over 14 years)	128
At work (many over 14 years)	93
Children at school (distribution in May, 1914)	1,281
Public School 76	764*
School of Our Lady of Good Counsel	379
Holy Rosary School	35
St. Stanislaus School	6
Paret Memorial Kindergarten	73†
Social Settlement Kindergarten	24†

In addition to these 1,281 children distributed in the various schools, the home visits discovered the following group of children of school age who had not attended any school:

B., eight years, was kept at home on account of hare-lip; the parents were not married.

K. S., ten years, had never attended school; the mother, an immoral woman, wanted the child at home.

E. C., eight years, had never entered school, ran around among the worst associates; mother immoral.

W. N., ten years, and L. N., eight years, had not entered school; were accustomed to steal coal and sell it.

F. M., ten years, deaf mute, had received no education.

There were also discovered by the home visits six children with such marked mental defect that they had never been sent to school. These children belonged to the group of idiots or low-grade imbeciles, and the problems they presented were merely those of custodial care. Two children from this district were already in the Rosewood Training School.

The total number of 1,281 school children can be divided into large groups according to their mental level, this term being used to include not merely the intelligence of the child as determined by standard tests, but also those other mental factors which determine its ability to adjust itself to its environment. The children are accordingly distributed according to their prospective social efficiency.

Group A: The first group of the total number of 1,281 school children consisted of 22 children with the most pronounced mental defect. The most that can be hoped for the future of such individuals is that under especially favorable circumstances they may have some simple occupation, and may be safeguarded from the dangers to which they are peculiarly exposed. They cannot be expected to respond to standards which are binding on the normal adult; they will never be able to direct their affairs with ordinary prudence; for their support they will depend on the tolerance of their employers and the help of their friends. They will be specially liable to recruit the ranks of the vagrants, the alcoholics, the prostitutes and the delinquents. They will be unfit for parenthood. Their children, legitimate and illegitimate, will themselves in large proportion be mentally defective. Theoretically it would be to the advantage of the rest of the community if such individuals were segregated in colonies, safeguarded from dangers and prevented from propagating; and the segregation of such individuals would be most suitably carried out in childhood. In the present state of affairs, however, and for a long time to come, these children will be brought up at home and will go to school with their normal comrades. The school authorities, therefore, cannot afford to ignore the problems presented by these children. The nature of these problems can best be realized by running over the extremely summary data presented in Table I (pages 118–120).

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*Eight of these children were under six years of age.

†The number of the children in the kindergarten above six years of age.

In this district the children of this type constitute approximately 2 per cent of the school population.

The large majority of the group are in the ungraded class, having been found to be quite unsuited for the ordinary grades. But a glance down the last column will show that these children have frequently spent a considerable time in the ordinary grades before being relegated to the ungraded class. This is an extremely important point to note; not only does it mean that the defective child has been submitted to a kind of training not at all adapted to his special requirements, and therefore probably more detrimental than beneficial, it means that the defective child has taken much of the time of the teacher which should have been devoted to the normal children. The presence of defective children in the ordinary grades means the serious dilution of the efficiency of the teaching of the normal children. Occasionally a teacher has reported an extremely slight improvement in the condition of one of these special children at the end of a session, but at the cost of the comparative neglect of the rest of the whole class. It must always be kept in mind that emphasis is laid on suitable provision for the subnormal child largely in order that the normal child and the normal adult may have better training, better opportunities and fewer handicaps. Neglect of the subnormal means a handicap of the normal child.

As one glances down the last column in the table the early beginnings of later delinquency are already only too evident. These children have not merely defective intelligence; that is from the social point of view the least important of their characteristics. Their general adaptability, their responsiveness to moral standards is seriously at fault; they are difficult in their relations with their fellows, they tend to lie and steal, and sexual misdemeanors begin at an early age.

The future of these individuals is already foreshadowed by the lives of other members of the same families. In several cases the mother is noted as living an immoral life, and in two cases the mother is said to be syphilitic; alcoholism, delinquency and sexual immorality stand out prominently in the family histories. The brother of one of these children, himself of very low mentality, married at fifteen; it is evidently possible in this community for a defective lad to get some official sanction for his marriage.*

One girl of this group, a few months after the survey, took up work at a seine factory. She has entered the ranks of the wage-earners, but unfortunately without any safeguards whatever. Although the community through the school system was in a position to take cognizance of her marked limitations during many years, the girl becomes a wage-earning unit on the same footing as her normal fellows; the probable price that has to be paid for this neglect may be estimated by the fact that her mother and maternal aunt are immoral, and that her brother, alcoholic since childhood, has been several times in jail.

With regard to this whole group the question may well be raised whether, in view of the present impossibility of retaining all such children in special institutions, some degree of supervision might not be exercised over these individuals when they pass out of the school system. The nucleus of a possible department for this purpose already exists. In Maryland a child who is not yet sixteen and who is unable to pass the fifth grade is not allowed to work, except with a special permit from the Bureau of Statistics; this permit is not granted in any case unless the child is over fourteen. A great number of these children, therefore, come under the jurisdiction of the Bureau of Statistics, where they are liable to appear as soon as they are fourteen in order to be allowed to work; naturally this does not apply to the girls in anything like the same proportion as it does to the boys. The former are more likely to remain at home than to apply for a permit to go out to work.

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*The boy had misrepresented to the minister his age and that of the girl he married, but evidently no further evidence than his own statement was demanded.

This Bureau, therefore, if somewhat elaborated and working in close co-operation with the schools, is an organization, which the community has already at hand, by means of which the accurate enumeration and some supervision of these individuals could be accomplished.

As it is, after the age of sixteen, they are officially lost to sight, and when their condition becomes such that the community has again to take cognizance of them, through one or other of the various conditions so frequently referred to already—illegitimate child birth, alcoholism, delinquency, pauperism—there is no provision of any kind available which takes into consideration their constitutional defect. The state of Maryland has made no provision for adult mental defectives, except for those who, before sixteen, have been admitted to an institution. They are, therefore, to be found in almshouses, jails and hospitals for the insane.

Group B: The second group consists of 78 children with a mental equipment not so strikingly inferior as that of the children included in Group A. Even should the provision of institutions for subnormal children be very considerably augmented, only a small proportion of this group of children would be unhesitatingly referred to them. Their prospects of modest social efficiency are slightly brighter than those of the children of Group A. The limitations of the latter children are so obvious that they are soon segregated in special classes; the limitations of the children in this group (Group B) are, however, not so glaring; the children are less promptly and less certainly separated from the normal children, and they are, therefore, to be found in much greater numbers distributed throughout the grades.

As their defects are less glaring than those of the children in the first group, they are more likely to be misunderstood; they are more apt to be judged by the standards suitable for the normal child and to be punished for faults and deficiencies which are the almost inevitable result of their constitutional limitations.

It is well known that this lack of understanding of their limitations seriously increases the difficulties of these children, and favors the development of anti-social traits; it has much to do with the development of truancy with bad comrades, and of sexual and other forms of delinquency.

The very fact that the intelligence of these children is more developed than that of the children in Group A increases the social danger of the development of delinquent trends.

These children are less liable than those of the former group to become in adult life completely dependent upon society, and are more likely to be found in the general community drifting along at the lowest social level. Their general adaptability, their economic efficiency, their happiness will largely depend upon how far their early training has been adapted to their constitutional limitations and their special requirements. During the school period there is ample opportunity for the community to appreciate these constitutional limitations. The neglect of any special attention to their training has to be paid for later by the community in the support of numerous dependents, who might otherwise, with a little care at an early state, have developed a certain measure of economic independence.

In tabulating the data regarding these 78 children in this group a subdivision has been made into those who approximate closely to those in Group A (12 children), and those who, even with generous institutional provision, would probably remain to be dealt with by the school system (66 children).

The prospects of social efficiency for the former group are extremely poor and the danger of later delinquency or sexual immorality is to a certain extent indicated by the brief notes on their personal traits and the family situation.

This group of 12 children might quite appropriately be grouped along with those of Group A, which would then consist of 34 children; this group of defective children would then be estimated as forming approximately 3 per cent of the school population.

It is obvious that the personal equation has to be considered in making use of statistics on subnormal children. It is worth noting that Dr. Goddard, in his survey of a school population of two thousand children, based merely upon the result of the Binet-Simon intelligence tests, concluded that of the children in the first six grades 3 per cent were feeble-minded, while 15 per cent were "merely backward."

In Table II (page 121) are tabulated the data with regard to the twelve children of Group B with the more pronounced mental defect.

Of the 66 less seriously handicapped children of Group B there are many, doubtless, whose prospects seem extremely poor and who would probably have the best chance for a healthy, happy and modestly efficient life if they were at the present time placed in an institution for subnormal children; but in view of the actual situation, which makes no such provision for the more seriously involved children of this group (12 children) nor for the 22 children of Group A, it would be somewhat utopian to suggest institutional provision for any considerable proportion of the less seriously handicapped children.

Sentimental considerations rather than a sober appreciation of the actual facts and of the probable future course of events are apt to have much to do with the decision as to the individual case. In the case of a girl like G. 11, fourteen years of age, in the ungraded class, whose mother is living an immoral life, the very great probability that she will follow in her mother's footsteps might make admission to a special institution advisable. On the other hand such a proposal is apt to meet with considerable sentimental opposition.

In Table III (page 123) are tabulated the data with regard to these 66 children, the majority of whom will as adults be more or less able to drift along in the community and who belong to a type that will always form a considerable proportion of the school population.

As adults these individuals are likely to lead rather shiftless lives; their wage-earning capacity is small; they are apt to indulge in alcoholic and sexual excesses; they tend to spread venereal disorders; at the best they are frequently dependent on charitable organizations for support, at the worst they are delinquent, alcoholic and disseminators of disease. During the early period of their lives, when much might have been done to develop the formation of good habits of adjustment, they have been subjected to a school régime, which laid all the weight on a type of instruction which they were constitutionally unable to absorb. To a large extent the instruction given to them was thrown away; and thus the time was wasted during which they might have been trained to find satisfaction in simple activities which were not without economic value. It is strange to think that in an intelligent community these children are drifting through the schools, without any serious organized attempt being made to deal with their problems.

With regard to Tables II and III, it is to be noted that the data with regard to the children in the public school are fuller than those with regard to the other children.

If it had been possible to have for all the children as full data as were available in the case of the children in the public school, the number of children in this group would no doubt have been still larger.

To appreciate the full meaning of the facts presented in the above tables it is necessary to form a picture of the adult life of these individuals, to see them as parents in squalid homes, living in irregular relationships with companions with cognate defects, a constant drain upon the facile and short-sighted charity of the community, drifting through life aimlessly and rather pitifully, reproducing without care and handing over to others their defective offspring, which the community will handle in the same haphazard manner as that in which it has dealt with the parents.

The situation is well exemplified by the case of a mentally defective woman who came to the dispensary of the Phipps Psychiatric Clinic from another district. The patient, a woman of thirty-two, at the time of examination was pregnant for the seventh time. As a girl she had received little school education but had been brought up by her worthless parents to beg, lie and steal. The father was a professional beggar with a criminal record who exploited every charitable organization; the mother, probably feeble-minded, connived at the immorality of her daughters; the family of this couple consisted of ten children. Of these ten individuals all except one became intemperate and immoral; all of the daughters, save one, married vagabonds and lived apart from their husbands. One daughter, an imbecile, was admitted to Bay View, but not before she had been seduced. Our dispensary patient had been seduced at sixteen; her seducer was married to another woman. She continued, however, to live off and on with this man for fourteen years, and already six children had been born from this depraved union. "She is still begging and stealing while the community cares for her children." The three generations of this family have cost the community thousands of dollars, which have been spent in no constructive work; the problems of the first couple have been merely multiplied in the descendants. Before one turns away in economic indignation at suggestions for rather comprehensive provisions for the mentally defective, it is well to keep in mind the large amount of money which is being steadily expended on such families in palliative measures.

The imbecile daughter, who was seduced before her admission to an institution, would have been admitted earlier had it not been for the persistent refusal of the parents to give their consent. It may be discussed how far, in such a situation, the community is not in duty bound to exert its authority, even though it should have to override the wishes of a professional beggar and his feeble-minded wife.

The unfortunate woman of thirty-two with her seven illegitimate children might with suitable training have developed into a contented fairly efficient worker in some institution or in some other environment provided with certain safe-guards. Her illegitimate children are the offspring of the neglect of the community and the mental defect of the mother; the money spent in caring for the seven illegitimate children might have been better employed in the segregation of the woman.

Cases like the above are familiar to most social workers. The extent of the ramifications of a bad stock in the community has been most strikingly exemplified by Dr. Goddard in his study of the Kallikak Family.*

This information, however, acquired by special workers, and now available in print, has not as yet been assimilated by those upon whom the community depends for the initiation of practical steps of a constructive nature.

Group C: In the two previous groups have been included those children whose special requirements are too obvious to be seriously disputed. The interests of the normal child and of the normal adult require that suitable provision be made for the training of these subnormal children. There is in addition to the two groups of children already discussed a third group, whose deviations from the normal are not so striking and whose special requirements may not be so generally admitted. A more thorough investigation would no doubt show that some of these children really belong to the groups already discussed. In any case the data available show that they are different from their comrades, while on the other hand they are receiving the same training as

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*Goddard, H. H. *The Kallikak Family, A Study in the Heredity of Feeble-Mindedness.* New York, 1912.

the latter. The very fact that their intelligence is not so strikingly defective as that of the children in the two previous groups suggests that here may be a much more grateful task to take up. The potential economic efficiency of these children is greater than that of the children in the previous groups, while as potential delinquents the somewhat higher level of their intelligence makes them only the more detrimental to society. There is, therefore, still more to be gained from consideration of the needs of the children in this group than from attention to the wants of the more defective. The alternatives of delinquency and dependency on the one hand and of fair economic efficiency on the other, in this group as in the others, will be considerably influenced by the training during the school period.

This group consists of 66 children, the data concerning whom are tabulated in Table IV (page 129).

The figures furnished in the preceding pages represent the number of individuals in the school population who have special requirements. It is of interest to know whether the proportion of families involved is the same as the proportion of individuals involved, or whether a few prolific families of bad stock create a somewhat exaggerated impression of general defect. The 168 children with special requirements represent 129 families; in 97 families only one of the children (*i. e.*, of school age) belonged to the special groups, while in 32 families more than one special child was found, 71 special children being contributed by these 32 families.

THE SCHOOL AND ITS COMPOSITION—DISTRIBUTION OF SUBNORMAL CHILDREN THROUGHOUT THE GRADES

Reference has already been made to the fact that the fullness of the data available with regard to the children from the different schools varied considerably. The most satisfactory group from this point of view was that of the children of Public School 76. As a standard of comparison the analysis of the data with regard to this group of 764 children may yield figures more useful for some purposes than analysis of the total 1,281 school children of the district. In the case of these children there was as a rule available a fairly complete record of the whole school history of the child; it was quite complete from the date of its entrance into this school. In the case of each one of the children of this school, who showed any anomalous traits suggestive of mental defect, the characteristics of the child were reviewed in a conference of the teachers and the special workers. Only those children were tested by the Binet-Simon intelligence scale whose poor school record or family history suggested the desirability of such a test. Of the 764 children those with special requirements were grouped in the three groups described above.

Group A: The most defective children. In this group were 22 children. This number embraces the whole group of this type of children in the district. The explanation lies in the distribution of these children in the various schools. The public school has a special class, adapted to their needs, in which the training is almost altogether along the lines of manual occupation. Almost all the children of this type in the district are as a rule, therefore, to be found in the public school; twelve of the children in this group at the public school had Roman Catholic parents. In October when the children of the parochial school were examined, two of these children were pupils there; they had been already examined in March, when they were pupils at the public school. It is obvious, therefore, that with regard to children of this type the proportion of 22 in 1,281 is to be taken as representing the local situation rather than the proportion 22 in 764, the latter proportion being due to the above accident of distribution. With regard to the other groups for whom no special provision is made in either school, except in so far as a few of them are to be found in the special class in the public school, there is not the same disturbing factor of distribution to be considered; the children in the public school, therefore, as far as these larger groups are concerned, more nearly correspond to a random sampling of the whole school population.

Group B: Sixty-three children.

Group C: Fifty-nine children.

Group of apparently normal children: Six hundred and twenty children.

These figures show that in this district 22 children out of 1,281 show a pronounced mental defect, 63 children out of 764 have a less marked degree of mental defect, making advisable some modification of their school training; and 59 more children in this group of 764 would, under an efficient educational organization, have attention paid to their special requirements. Should these figures appear extreme the data with regard to the children are available in the tables furnished above, and the grouping may be modified according to individual educational standards. The exact requirements of the group of 59 children may be the subject of debate; but the special requirements of the 63 children in the previous group can hardly be called in question. It will probably be admitted by all who care to run over the data in the tables furnished above that in addition to the defective children of Group A at least 63 out of the 764 children, *i. e.*, approximately 11 per cent of the children in this school, have special requirements in the way of school training. To say that in the case of 144 children out of 764, *i. e.*, in 18 per cent the methods of school training should be adapted to their constitutional limitations and to their prospective outlook for the future may appear extreme. The administrator of the traditional education may impatiently suggest that to go much further would mean that the education of the remaining 620 children should take into consideration their adult tasks and the conditions which regulate the formation of habits. And in this impatient suggestion we may perhaps learn the lesson taught by the study of the subnormal child. It may become recognized that not only for the subnormal child but for the normal child the task of education is that of forming the best habits of adjustment to the environment, which his constitutional endowment will allow. A discussion of the principles of education in general is beyond the scope of this survey; but the study of the subnormal child and of his training will furnish an important contribution to such a discussion.

The extent of the influence of the subnormal children on the education of the normal school population may be better appreciated by the study of their distribution throughout the grades. This is shown in the following tables.

In Table V (page 137) is shown the distribution throughout the grades of all those children who showed "mental retardation" by the Binet-Simon intelligence tests, *i. e.*, who got a score by this scale which fell short of their real age by one, two or more years. In the public school only those children were examined by this method in whom other data indicated the possibility of some mental inferiority. If all the children had been examined, the number of those showing some "mental retardation" would have been undoubtedly larger; at the same time a certain number would have been found to show a "mental age" in advance of their real age. The number of children showing some "mental retardation" may seem unusually large to those unacquainted with the terms employed. The limits of normal variation are such that "mental retardation" of one or two years, and perhaps even of three years does not necessarily mean that a child is subnormal; it is simply one fact which has to be weighed along with the school data and the other facts available concerning the child.

The fact that in this survey a slight degree of "mental retardation" has not been taken by itself as evidence that the child is subnormal and has special requirements, is made clear in the comparison between Table V and Table VI. In Table VI (page 137) is shown the distribution throughout the grades of those "mentally retarded" children, who in view of all the other data available were considered as subnormal and with special requirements.

The same data are presented in graphic form in Charts 1 and 2. Table VII (page 138) and Chart 3 represent the distribution in the grades of the subnormal children, arranged in the three groups described above (Groups A, B, C).

The difference between Chart 4 and Chart 5 is much more striking than that between Chart 1 and Chart 2. The fact that such a small proportion of the "mentally retarded" children of Chart 4 appear as "subnormal children with special requirements" in Chart 5, is merely an indication of the inadequacy of the data obtained with regard to these children. In the absence of full data with regard to the school progress of the child, and without a detailed discussion with the teachers the result of the intelligence tests was in only a small proportion of cases considered sufficiently striking to place the child among the group of subnormal children. Out of 14 children in the parochial school who showed "mental retardation" of four years, only 6 were placed in the subnormal group; with regard to the other 8 the data available were extremely meagre. J. H., a girl twelve years seven months old, had the "mental age" of 8^3 and was in the fourth grade; she was born in Hungary and Hungarian was the language spoken at home; her father, a drunkard, committed suicide. This girl was not classed among the subnormal children, although many might consider the above data very suggestive. Similarly B. E., a girl twelve years seven months old, with the "mental level" of 8^4, in the sixth grade (which does not correspond to the same grade in the public school) was not classified with the subnormal children. These examples show that the numbers given in this survey represent a sufficiently conservative estimate of the subnormal children. In the public school with the fuller data, out of the 31 children who presented four years' "mental retardation," 23 were definitely placed in the subnormal group; it is, therefore, reasonable to assume that a similar proportion would be found in the parochial school and this would give a much larger figure than 6 out of 14. Even in regard to the children in the public school the numbers given represent a minimum. Out of the 31 children in the public school with four years' retardation, 8 children were not classified as subnormal; of these 4 presented apart from the result of the intelligence tests no adequate data. The 4 other cases were the following:

D. E., 14:4, B. S. 9^3, in sixth grade; has strabismus. Her sister although three years younger, 11:0, has practically the same level of intelligence, B. S. 9^2.

K. F., 12:6, B. S. 8^4, in fourth grade.

M. M., 13:6, B. S. 9^3, in fifth grade; came to United States at nine years.

N. L., 13:7, B. S. 9, in fifth grade; defective speech, and poor memory; had head injury at seven years.

Table I—Group A: Twenty-two children with no prospect of becoming self-supporting adults

Note: Instead of having their own initials in the following tables, the children are numbered and the sex indicated by the letter B(oy) or G(irl). (See explanation of Binet-Simon tests page 101.)

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 1........	11:0	7^1	Ungr.	Brother, 13: 11, B. S. 10^3, is working, inefficient.	3 (?) years in 1st Gr., then 4 years in ungraded class, cannot do an errand, can't read, write nor count.
B. 2........	12:1	7^4	Ungr.	Mother immoral. Brother, 16, married at 15, of very low mentality. Brother, 7, B. S. 3^3, is delicate; began to talk at 6.	Difficult boy.
G. 1 (Sister of B. 45 and B. 52)	12:9	7^2	Ungr.	Mother of low mentality, cannot speak English. Brother, 13: 6, B. S. 9^4, in 4th Gr.; thief. Brother, 11: 9, B. S. 8^1, in 2nd Gr.	Restless, noisy, untruthful; cannot read nor write nor do an errand.
G. 2	11:7	6^3	Ungr.	Mother of low mentality, Father alcoholic.	After 1½ years in 1st Gr. has been 2 years in ungraded class; defective speech.
B. 3 (Brother of G. 19 and G. 47)	14:3	8^3	Ungr.	Father slow, erratic. Pat. uncle insane. Pat. aunt immoral. Sister, 12, B. S. 9^2, in 3rd Gr., is difficult, steals, lies. Sister, 9: 8, B. S. 7^3, in 2nd Gr.	4 years in 1st Gr.; after ½ year in 2d Gr. was placed in ungraded class: difficult, lies, smokes, steals.
B. 4	12:6	6^3	Ungr.	Father slow. Brother, 8: 5, B. S. 5^4, 2½ years in 1st Gr.	Doesn't know his letters, can't count, unable to grasp instruction; 3 years in 1st Gr. 2 years in 2nd Gr.
B. 5 (Brother of G. 17)......	14:4	7^4	Ungr.	Mother alcoholic. Father of low mentality. Sister, 23, immoral, guilty of infanticide (?). Brother (? age), immoral. Sister, 11: 9, B. S. 9; speech defect; in 2nd Gr.	Peculiar mood; lies, steals, smokes.
G. 3 (Sister of B. 7).........	14:1	6^3	Ungr.	Mat. uncles and aunts (? number), defective. Brother, 16: 1, B. S. 7^1, after 1st Gr. has been 4 years in ungraded class.	Unstable; 3 years in 1st Gr., 4 years in ungraded class; cannot do an errand, can't count nor read.

Table I—Group A—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
G. 4 (Sister of B. 6)..........	14:9	8	Ungr.	Mother, immoral, syphilitic. Brother, 14: 9, B. S. 6^2, in 3rd Gr.; is truant, lies.	In ungraded class after being tried in 4th Gr.; truant; (?) sexual immorality.
B. 6 (Brother of G. 4).......	14: 9	6^2	3	Mother immoral, syphilitic. Sister, 14: 9, B. S. 8, in ungraded class; truant; (?) sexual immorality.	2 years in 1st Gr., 2 years in 2nd Gr., truant, steals, lies; has recently disappeared.
B. 7 (Brother of G. 3).......	16: 1	7^1	Ungr.	Mat. uncle and aunts (? number), defective. Sister, 14: 1, B. S. 6^3, in ungraded class for 4 years; was 3 years in 1st Gr.	Puny; adenoids; unstable; 2 years in 1st Gr., then 4 years in ungraded class.
G. 5.......	10: 0	6^4	1	Mat. grandmother epileptic. Mother epileptic, of low mentality. Sister, 11, highly neurotic.	Childbirth very difficult, development very slow; "highly neurotic" from infancy, wets clothing, 2½ years in 1st Gr.
B. 8	11: 9	8	Ungr.	Mother alcoholic.	After 2 years in 1st Gr. has been 2 years in ungraded class; neurotic; chorea; in juvenile "court" for stealing; considered defective by teacher and special worker.
B. 9 (Brother of B. 15, G. 53 and B. 87)..	13: 7	9^2	Ungr.	Mother of low mentality. Brother, 10: 7, B. S. 7^4, in 3rd Gr., was 2½ years in 2nd Gr. Sister, 9: 8, B. S. 6^2, in 2nd Gr., was 2 years in 1st Gr. Brother, 7: 0, B. S. 5^1, in Kg., is considered defective by teacher.	After 1½ years in 1st Gr. has been 2 years in ungraded class; poor character, very difficult.
B. 10	11: 1	6^4	2	Mother has spells (? epileptic).	Sickly, difficult.
G. 6	13: 4	8^3	Ungr.		After 1½ years in 2nd Gr. has been 2 years in ungraded class.
G. 7 (Sister of G. 25)........	9: 2	5^2	Ungr.	Mother of low mentality, deserted by father. Sister, 12: 4, B. S. 8^1, in 4th Gr.	2 years in 1st Gr., 2 years in ungraded class; can't read, write, nor count; poor at manual work: defective speech.

Table I—Group A—*Concluded*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 11 (Brother of G. 12)......	14: 5	8^4	Ungr.	Mother is slow. Sister 12: 9, B. S. 7^3, in 5th Gr.	After $1\frac{1}{2}$ years in 4th Gr. was placed in ungraded class.
B. 12......	12: 3	7	Ungr.	Mother, careless, is living in 2 rooms in a cellar.	Absent-minded, dreamy, inattentive; after 1st Gr. was placed in ungraded class.
G. 8.......	15: 3	9^3	Ungr.	Mother immoral. Brother, 21, of low type, has been in jail several times, alcoholic since childhood. Mat. aunt immoral; several cousins on mat. side defective.	(Later; is working at a seine factory.)
B. 13 (Brother of B. 14)......	12 (?)	6^2 (March 10, 1914) 7^2 (Oct. 13, 1914)	2	Mother alcoholic. Brother, 13 (?), B. S. 8, in 2nd Gr.	
B. 14 (Brother of B. 13)......	13 (?)	7^4 (March 10, 1914) 8 (Oct. 13, 1914)	2	Mother alcoholic. Brother, 12 (?), B. S. 7^2, in 2nd Gr.	

Table II—Group B: Seventy-eight children with less pronounced mental defect then those in Group A, but obviously with special requirements: (a) Twelve children, more seriously handicapped mentally than those in Table III.

(See explanation of Binet-Simon tests on page 101)

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 15 (Brother of B. 9, G. 53, B. 87)......	7:0	5^1	Kg.	Mother of low mentality. Brother, 13:7, B. S. 9^2, is in disciplinary class, did not pass 1st Gr. Brother, 10:7, B. S. 7^4, after 2½ years in 2nd Gr. is in 3rd Gr. Sister, 9:8, B. S. 6^2, after 2 years in 1st Gr. is in 2nd Gr.	Is considered mentally defective by teacher; is difficult to manage; speech defective.
B. 16 (Brother of B. 19)......	9:5	7^1	1	Father, laborer, gave up work because it was too hard. Mother very deaf. Brother, 14:7, B. S. 10, after 3rd Gr. passed into ungraded class; steals.	2 years in 1st Gr.; considered defective by teacher and special worker.
B. 17	12:1	9^2	Ungr.		Never beyond 3rd Gr.; considered defective by teacher and special worker.
B. 18	12:9	9^1	Ungr.	Mother alcoholic.	After 2 years in 3rd Gr. has been in ungraded class for 2 years; difficult, lies, arrested for stealing.
G. 9	13:4	9^2	Ungr.	Mat. aunt epileptic. Brother, 11:1, B. S. 9.	Epileptic; after 1½ years in 3rd Gr. has been 1½ years in ungraded class.
B. 19 (Brother of B. 16)......	14:7	10	Ungr.	Father, laborer, gave up work because it was too hard. Mother very deaf. Brother 9:5, B. S. 7^1, 2 years in 1st Gr., considered defective by teacher and special worker.	After 2 years in 1st Gr., 1 year in 2nd Gr., 2 years in 3rd Gr. has entered ungraded class; arrested for stealing money, smokes.
G. 10	14:9	8^3	4	Sister, 11:4, B. S. 9^2, in 4th Gr., very slow. Sister 9:3, B. S. 7^3, in 2nd Gr., very slow.	Very slow.
G. 11 (Sister of B. 88)........	14:4	9^4	Ungr.	Mother after divorce lived with another man. Brother, 12:4, B. S. 9, in 4th Gr.; had spasms in infancy.	

Table II—Group B—*Concluded*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
G. 12 (Sister of B. 11)	12:9	7^3	5	Mother is slow. Brother, 14:5, B. S. 8^4, after 1½ years in 4th Gr. was placed in ungraded class.	
G. 13	14:3	9^3	Ungr.	Mat. grandmother of low mentality.	After 1 year in 3rd Gr. was placed in ungraded class; immoral.
B. 20	11:4	7	1	Mother immoral. Sister, 12:4, B. S. 9^3, in 3rd Gr.	
B. 21	11:6	7^3	2		

Table III—Group B: Seventy-eight children with less pronounced mental defect than those in Group A, but obviously with special requirements; (b) sixty-six children with prospective social efficiency greater than that of the twelve children in Table II.

(See explanation of Binet-Simon tests on page 101)

Name	Age	Binet-Simon	Grade	Heredity	Other Data
G. 35	10:10	9^1	3	Cousin defective, 13:4, B. S. 9^2, is epileptic.	2 years in 3rd Gr. Defective speech.
G. 36	8:8	7^2	1	Mat. grandmother alcoholic, insane. Mother stupid, almost illiterate. Parents have separated (American). Sister, 10:9, B. S. 7^2, has been 2 years in 2nd Gr.	2 years in 1st Gr.; quarrelsome, easily loses control of temper.
B. 67 (Brother of B. 25)......	10:9	9^1	3	Father, tubercular; was black sheep of family. Brother, 12:7, B. S. 10, is in 4th Gr., with poor character. Brother, 8:9, B. S. 6^4, poor character.	2 years in 2nd Gr.; self-abuse; stubborn, quarrelsome, truant. The children have been taught to beg.
G. 37	7:10	6^3	1	Mat. grandfather alcoholic, illiterate. Mother started work at 10 years, married at 17, is neurotic. Brother, 10:5, B. S. 7^4, in 3rd Gr., is very peculiar. Brother, 8:9, B. S. 8, in 3rd Gr., is peculiar, unstable.	Defective speech; 2 years in 1st Gr.
G. 38	10:6	9^1	3	Father insane. Pat. uncle peculiar, alcoholic. Mother (?) immoral.	Was 3 years in 1st Gr. Slow, morose, untruthful.
B. 68	7:4 6:10	5^3 5^1	1	Father insane. Mother immoral.	Seemed defective to special worker.
B. 69	10:2	8^3	2	Mother died from apoplexy.	2 years in 1st Gr., 2 years in 2nd Gr.
B. 70	9:5	8^4	3		Sickly, "queer at times," deaf; drawling speech. Considered defective by teacher and special worker.
G. 39	8:0	6^4	1		Mongolian type; 2 years in 1st Gr.

Table III—Group B—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
G. 40	10:3	8^4	2	Mother of low mentality. Sister, 8, had spinal meningitis at 11 m., has not talked or walked since, violent, destructive.	
B. 71 (Brother of B. 44)......	9:0	7^3	1	Brother, 12, B. S. 9^1, was 2½ years in 1st Gr., 2½ years in 2nd Gr., is now in 3rd Gr. Sister died from spinal trouble.	2 years in 1st Gr.
G. 41	6:2	4^3	Kg.		Strabismus; appeared defective to teacher and special worker.
G. 42	7:9	6^3	1	Mother immoral, alcoholic. Half-brother 12:3, B. S. 8^3, is in 3rd Gr.	2 years in 1st Gr.; neurotic.
G. 43	8:3	6^4	1	Mat. aunt and uncle (?) epileptic.	Appeared defective to special worker.
B. 72 (Brother of B. 58)......	10:10	9^2	3	Mother, illiterate, says she has forgotten how to read and write (is American); married at 16, had 15 children, of whom 5 died in infancy with convulsions. Brother, 14, B. S. 9, is in disciplinary class.	2 years in 3rd Gr.
B. 73	8:5	7^3	3		Is considered defective by teacher; general behavior poor; untruthful, dishonest. Adenoids, middle-ear disease.
G. 44 (Sister of G. 26)	8	6^2	1	Mother, in U. S. 5 years, cannot speak English. Sister, 11:1 B. S. 7, is difficult to manage.	1½ years in 1st Gr.; unstable, difficult to control, considered defective by teacher.
B. 74	10:8	9	3		2½ years in 2nd Gr., difficult character; untruthful, truant.
B. 75	8:9	7^2	1	Brother, 13:9, B. S. 9^2, smokes constantly. Several cousins defective.	2 years in 1st Gr.

Table III—Group B—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 76	9:4	8	3	Sister, 11:4, B. S. 9^2, is difficult child.	Considered defective by teacher.
B. 77 (Brother of B. 49 and B. 86)	7:8	6^1	1	Father alcoholic. Brother, 12:6, B. S. 9^3, has chorea; after 1½ years in 2nd Gr. has spent 2 years in ungraded class.	1½ years in 1st Gr.; difficult boy; self-abuse; smokes, plays truant, steals. Born with 6 fingers on each hand; is considered defective by teacher and special worker.
B. 78	6	4^3	Kg.		Drools; considered defective by special worker.
B. 79	5	3^1	Kg.		Neurotic; self-abuse; choreiform movements considered defective by special workers.
G. 45	10:11	8^2	2		1½ years in 1st Gr., 2 years in 2nd Gr.; industrious, stupid.
B. 80 (Brother of 59)	10:3	7^3	3	Mother, very ignorant. Father has deserted family. Brother 14, B. S. 9^1, is difficult. Brother, 15, very slow, is at work.	
G. 46 (Sister of G. 52)	10:11	8^2	2	Sister, 12:0, B. S. 8^4, in 3rd Gr.	2 years in 2nd Gr.
G. 47 (Sister of B. 26)	11:10	9	3	Brother, 10:5, B. S. 8^1, in 2nd Gr.	Blind in one eye from meningitis at 12 weeks.
G. 48 (Sister of B. 3, and G. 19)	9:8	7^3	2	Father slow, erratic. Pat. uncle insane. Pat. aunt immoral. Sister, 12, B. S. 9^2, in 3rd Gr., is difficult, steals, lies. Brother, 14:3, B. S. 8^3, after 2nd Gr. entered ungraded class, is difficult, lies, smokes.	2 years in 2nd Gr., tubercular, bed-wetter; defective speech.
G. 49	10:4	8	2	Brother, 13:10, B. S. 10, 2 years in disciplinary class. Sister, 8:3, B. S. 6^4, 2 years in 1st Gr.	

Table III—Group B—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
G. 50 (Sister of B. 28 and B. 50)	8:4	6^3	1	Mother alcoholic, nervous, with strabismus. Brother, 11:2, B. S. 7, is in ungraded class after 2 years in 2nd Gr. Brother, 9:4, B. S. 7^1, is in 2nd Gr., difficult; considered defective by teacher and special worker.	2 years in 1st Gr.
B. 81	10:10	8^3	2	Sister, 13:7, B. S. 10, in 5th Gr. Brother, age (?), can't read nor write, truant.	First went to school in the country. 2 years in 1st Gr.
B. 82 (Brother of B. 30)......	9:7	7^1	3	Brother, 7:10, B. S. 5^4, 2 years in 1st Gr., wets clothing, difficult boy; considered defective by teacher and special worker.	Considered defective by teacher and special worker.
B. 83	11:11	9	3		2 years in 1st Gr., 2 years in 2nd Gr.
B. 84	11:10	9^3	3	Parents alcoholic. Father deserted family.	2 years in 2nd Gr.
B. 85	12:0	9^2	5		Not doing even 4th Gr. work; defective speech.
B. 86 (Brother of B. 49 and B. 77).........	11:1	9	3	Father alcoholic, not self-supporting. Brother, 12:6, B. S. 9^3, in ungraded class; chorea. Brother, 7:8 B. S. 6^1, born with six fingers, difficult.	In 1st Gr. from 6 to 9; deaf; smokes.
G. 51 (Sister of B. 23)	13:6	10^1	5	Mother, 9 years in U. S., does not speak English. Brother, 11, B. S. 9^3, in ungraded class, very inefficient.	Considered defective by teacher and special worker.
G. 52 (Sister of G. 47)	12:0	8^4	3	Sister, 11:11, B. S. 8^2, 2 years in 2nd Gr.	Defective speech, the family, German, have had no settled residence in this country.
G. 53 (Sister of B. 9, B. 15 and B. 87)......	9:8	6^2	2	Mother of low mentality. Brother, 13:7, B. S. 9^2, did not pass 1st Gr., is in disciplinary class. Brother, 10:7, B. S. 7^4, in 3rd Gr. Brother, 7:0, B. S. 5^1, in Kg. is considered defective by teacher.	Was 2 years in 1st Gr.

Table III—Group B—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 87 (Brother of G. 53, B. 9 and B. 15)...	10:7	7^4	3	Brother of above.	Was 2½ years in 2nd Gr.; highly neurotic.
B. 88 (Brother of G. 11)......	12:4	9	4	Mother, after divorce, lived with another man. Sister, 14:4, B. S. 9^4, in ungraded class.	Spasms in infancy.
B. 89 (Brother of B. 27)......	11:9	8^4	3	Brother, 13, after 2½ years in 3rd Gr. was put in ungraded class; now has permit to work. Brother, 9:6, B. S. 7^2, 2 years in 1st Gr.	
G. 54	13:4	9^3	4	Father was divorced by mother on account of infidelity; tubercular.	Stammers. Lives with father and stepmother, cleans the bar of the saloon; 2 years in 1st Gr.; 1½ years in 3rd Gr.; very slow.
B. 90	10:11	8	2		Previously irregular attendance at country school; convulsions at 4 years; neurotic, easily excited.
B. 91	11:7	8^1	3	Brother, 14, as infant had marasmus, was 3 years in arms.	Difficult boy; 2 years in 2nd Gr., 1 year in ungraded class.
G. 55	12:4	8^4	4	Mother alcoholic, immoral.	Difficult childbirth; convulsions; is kept at home to do housework.
B. 92	13:3	9^3	4	Mother highly neurotic.	Truant, smokes, lies; 2 years in 4th Gr. Poor home atmosphere.
B. 93	11:8	8^3	3	Sister, 13:9, B. S. 8^3, in 5th Gr.; born in Germany.	Has been kept at home to look after baby.
G. 56	12:8	9	3		1½ years in 2nd Gr., 2 years in 3rd Gr.
G. 57	13:1	10	5	Father alcoholic. Mother (?), epileptic.	Truant, immoral, lies; (?) epileptic.

Table III—Group B—*Concluded*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B .94	13: 11	10^3	6	Brother, 11: 0, B. S. 7^1, never got beyond 1st Gr.; imbecile.	Is working (later report); employer reports that he is very inefficient.
G. 58	13: 3	9^4	4		
B. 95	12: 4	8^3	4	Father (American) cannot read nor write; is alcoholic.	2 years in 3rd Gr.; has choreiform movements.
G. 59	13: 4	10^1	5		Neurotic; considered defective by teacher and special worker.
G. 60	13: 11	9^2	5	Mother has "spells." Sister highly neurotic.	Highly neurotic; not interested in school, does other work efficiently. Has evidence of organic brain disease.
B. 96	13: 8	9^3	4		
G. 61	13: 4	9^2	4		Troublesome; likes the boys.
G. 62	12: 4	8^4	4	Mother stammers, is Hungarian, 10 years in U. S., speaks very little English.	Came to U. S. at 2 years; described as very slow, is overworked at home.
B. 97	14: 2	8^4	4		Hungarian, 3 years in U. S., lies, cheats, drinks, makes good progress.
G. 63	11: 1	8^4	2		
G. 64	10: 2	7^3	2	Mother has strabismus.	
G. 65	10: 1	8	2	Mother is slow. Sister, 12: 9, B. S. 7^3, in 5th Gr. Brother, 14: 5, B. S. 8^4, in ungraded class.	
B. 98	9: 10	6	1	Father alcoholic.	Language spoken at home is Polish.
B. 99	9: 8	6	1		Born in Poland; extremely poor home conditions.
B. 100	14: 8	10	5	Brother, 13: 6, B. S. 11, in 5th Gr.	Neurotic.
B. 101	14: 3	9^2	8		

Table IV—Group C: Sixty-six children with sufficient indication of mental anomalies during the school-period to make modification of the usual school training desirable

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 22	9:7	8^4	3		Considered defective by teacher and special worker; neurotic, stubborn, queer, difficult to manage.
B. 23 (Brother of G. 51)	11	9^3	Discipl.	Mother, 9 years in U. S., does not speak English. Sister, 13:6, B. S. 10^1.	After 2 years in 2nd Gr. has spent 2 years in an ungraded class; considered defective by teacher; at home he is forgetful, cannot go on an errand without a note; docile, cheerful.
B. 24 (Brother of B. 38 and G. 23)	10:1	7^4	2	Mother, 20 years in U. S., does not speak English. Brother, 12:2, B. S. 9^1, is in 3rd Gr. after 5 years at school; teacher considers him insane. Sister, 13:5, B. S. 9^1 has been 2 years in 4th Gr.	Is very difficult; has middle-ear disease; education is interfered with by berry-picking and tomato-canning; considered defective by teacher and special worker. 1½ years in 1st Gr., 2 years in 2nd Gr.
B. 25 (Brother of B. 67)	8:9	6^4	1	Father, tubercular, the black sheep of his family. Brother, 10:9, B. S. 9^1, is in 3rd Gr., difficult.	2 years in 1st Gr., truant, smokes, lies; considered defective by teacher and special worker. Children are taught to beg.
B. 26 (Brother of G. 47)	10:5	8^1	2	Sister, 11:10, B. S. 9, in 3rd Gr.	2½ years in 1st Gr.; truant, difficult.
B. 27 (Brother of B. 89)	9:6	7^2	1	Brother, 13, after 2 years in 3rd Gr. was put in ungraded class; now has permit to work. Brother, 11:9, B. S. 8^4, after 2 years in 2nd Gr. is in 3rd Gr.	2 years in 1st Gr.
B. 28 (Brother of B. 50 and G. 50)	9:4	7^1	2	Mother alcoholic, nervous, with strabismus. Brother, 11:2, B. S. 7, is in ungraded class after 2 years in 2nd Gr. Brother, 13:2, B. S. 10^3, 5 Gr., 2 years in 5th Gr.	2 years in 1st Gr. Difficult boy; considered defective by teacher and special worker.

Table IV—Group C—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 29	10	7^4	1	Mat. aunt and pat. aunt had epilepsy.	Difficult boy; bed-wetter.
G. 14	10:9	8^2	2		Chorea; 2 years in 1st Gr.
B. 30 (Brother of B. 32)	7:10	5^4	1	Brother, 9:7, B. S. 7^1.	2 years in 1st Gr.; wets clothing; difficult boy, considered defective by teacher and special worker.
B. 31	10:7	8^1	Ungr.	Aunt and uncle feeble-minded.	$2\frac{1}{2}$ years in 1st Gr., speech defective; considered defective by teacher and special worker.
B. 32	11:7	9^1	3	Father very excitable.	Extreme restlessness from infancy; very difficult, upsets the class; considered defective by teacher and special worker.
G. 15	10:3	8	2	Father, educated, erratic, unable to make a living. Brother, imbecile, in institution; 2 grown-up brothers (24, 22) usually idle.	Chorea. 2 years in 1st Gr., 2 years in 2nd Gr.
B. 33	12:3	10^1	Ungr.		After 1 year in 2nd Gr. has been 2 years in ungraded class; lies, steals, smokes.
B. 34	10:7	8^1	2		In 1st Gr. for several years.
B. 35 (Brother of B. 48)	8:10	6^3	1	Mother slow mentally, easily confused, alcoholic. Brother, 13:3, B. S. 10^1, in ungraded class after $1\frac{1}{2}$ years in 5th Gr.; poor character; very slow mentally.	3 years in 1st Gr.; considered defective by teacher and special worker.
B. 36 (Brother of B. 54)	11:0	8^1	2	Sister, 15:9, weighs 248 lbs., is of low mentality. Brother, 13:11, B. S. 10, after 3rd Gr. has been 2 years in ungraded class; difficult, lies, smokes.	2 years in 1st Gr.

Table IV—Group C—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
G. 16	11:12	8^3	1	Sister, 13: 2, B. S. 10^4, in 5th Gr.	1½ years in 1st Gr.
G. 17 (Sister of B. 5)	11:9	9^4	2	Mother alcoholic. Father of low mentality. Sister, 23, is said to have caused death of her illegitimate child. Brother, (age?) immoral. Brother, 14: 4, B. S. 7^4, after 1 year in 1st Gr. was 2 years in ungraded class; lies, smokes, steals.	Speech defect.
B. 37	8:2	6^1	1		3 years in 1st Gr.; considered defective by teacher and special worker; thief, born in Hungary.
B. 38 (Brother of G. 23 and G. 24)	12:2	9^1	3	Mother, 20 years in U. S., cannot speak English. Sister, 13: 5 B. S. 9^1, has been 2 years in 4th Gr. Brother, 10: 1, B. S. 7^4, in 2nd Gr. at school, is considered defective.	Difficult to control; considered insane by teacher.
G. 18	10:9	7^2	3	Mat. grandmother alcoholic, insane. Mother stupid, almost illiterate (American). Parents have separated. Sister, 8: 8, B. S. 7^2, in 1st Gr. for 2 years.	Cannot learn; is nervous, cannot remember if sent on errand; in 2nd Gr. for 2 years.
G. 19 (Sister of B. 3 and G. 48).	12:0	9^2	3	Father slow, erratic. Pat. uncle insane. Pat. aunt immoral. Brother, 14: 3, B. S. 8^3, after 2nd Gr. entered ungraded class; is difficult, lies, smokes. Sister, 9: 8, B. S. 7^3, 2 years in 2nd Gr.; defective speech; wets bed.	Is difficult, steals, lies; after ½ year in 4th Gr. was put back into 3rd Gr.
B. 39	12:2	9^1	3		Physical stigmata; neurotic; difficult. 2 years in 1st Gr., 2 years in 3rd Gr.

Table IV—Group C—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 40	13:8	10^1	Ungr.	Sister, 16, of very low mentality.	Pneumonia at 5, followed by spasms; strabismus; difficult, deceptive, smokes.
B. 41	13:10	10	Ungr.	Sister, 10:4, B. S. 8, in 2nd Gr. Sister, 8:3 B. S. 6^4, 2 years in 1st Gr.	After 3rd Gr. passed into ungraded class.
B. 42	12:3	8^3	3	Mother immoral, alcoholic, erratic.	
B. 43 (Brother of B. 4).......	8:5	5^4	1	Father slow. Brother, 12:6, B. S. 6^3, 3 years in 1st Gr. 2 years in 2nd Gr., 2 years in ungraded class; doesn't know letters, can't count, is difficult.	Defective speech. 2½ years in 1st Gr.
G. 20	13:2	9^2	Ungr.	Brother, 12:2, B. S. 9^4, in 7th Grade.	
G. 21	12:0	8^2	4	Mother deformed. Sister has illegitimate child.	
B. 44 (Brother of B. 71)......	12:0	9^1	4	Mother slow. Sister died from spinal meningitis (?). Brother, 8:11, B. S. 7^3, is in 1st Gr. for 2nd year.	2½ years in 1st Gr., 2 years in 2nd Gr.; truant.
B. 45 (Brother of G. 1 and B. 52)	11:9	8^1	2	Mother, of low mentality, cannot speak English. Sister 12:9, B. S. 7^2, in ungraded class for 4 years after 1st Gr.; cannot do an errand; dishonest. Brother, 13:0, B. S. 9^4, in 4th Gr.; thief.	Born in Germany, language spoken at home is German. 1 year in Kg., 2 years in 1st Gr., 3 months in ungraded class, ½ year in 1st Gr., 1 year in 2nd Gr.
B. 46	8:11	5^4	1		
B. 47	13: 7	10^1	Ungr.	Father alcoholic. Brother is slow. (Parents American.)	After 1½ years in 3rd Gr. has spent 2 years in ungraded class; spasms in infancy; speech defect.
B. 48 (Brother of B. 35)......	13:3	10^1	Ungr.	Mother, slow mentally, easily confused, alcoholic. Brother, 8:10, B. S. 6^3, in 1st Gr. for 3 years; is considered defective by teacher.	After 1½ years in 5th Gr. was put in ungraded class; defective speech; masturbation; difficult boy, lies, smokes.

Table IV—Group C—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 49 (Brother of B. 77 and B. 86)	12:6	9^3	Ungr.	Father alcoholic, not self-supporting. Brother, 11:1, B. S. 9, in 3rd Gr. Brother, 7:8, B. S. 6^1, born with 6 fingers; difficult boy.	After 1½ years in 2nd Gr. has been 2 years in ungraded class; chorea; a teacher who knows him well believes he can make a living.
G. 22	12:5	9^4	Ungr.		After 1 year in 3rd Gr. has been 2 years in ungraded class; difficult, sexual delinquency.
G. 23 (Sister of B. 38 and B. 24)	13:5	9	4	Mother, 20 years in U. S., cannot speak English. Brother, 12:2, B. S. 9^1, in 3rd Gr. after 5 years at school, considered insane by teacher. Brother, 10:1, B. S. 7^4, in 2nd Gr.; is considered defective by teacher.	2 years in 4th Gr.
G. 24	13:10	9^3	Ungr.	Brother, 12:2, B. S. 9, in 4th Gr. Sister, 10:0, B. S. 8, in 2nd Gr.	
B. 50 (Brother of B. 28 and G. 50)	11:2	7	Ungr.	Mother nervous, alcoholic; strabismus. Brother, 13:2, B. S. 10^3, in 5th Gr. Brother, 9:4, B. S. 7^1, in 2nd Gr.; difficult. Sister, 8:4, B. S. 6^3; 2 years in 1st Gr.	After 2 years in 2nd Gr. is now in ungraded class.
B. 51	13:0	9^1	4		
B. 52 (Brother of B. 45 and G. 1)	13:6	9^4	4	Mother of low mentality, cannot speak English. Sister, 12:9, B. S. 7^2, never got beyond 1st Gr., in ungraded class for 4 years; cannot do an errand; steals. Brother, 11:9, B. S. 8^1, in 2nd Gr.	Steals; is considered silly by neighbors.
G. 25 (Sister of G. 7)	12:4	8^1	4	Mother, of low mentality, deserted by father. Sister, 9:2, B. S. 5^2, in ungraded class, 2 years in 1st Gr., 2 years in ungraded class; can't read, write, nor count, poor at manual work; defective speech.	Deaf; neurotic; excitable.

Table IV—Group C—*Continued*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 53	13:9	9	Ungr.	Mother neurotic. Father alcoholic.	2 years in 1st Gr., 1½ years in 2nd Gr., 1 year in ungraded class; in juvenile court for stealing coal.
B. 54 (Brother of B. 36)......	13:11	10	Ungr.	Sister, 15:9, weighs 248 lbs., is of low mentality. Brother, 11:0, B. S. 8^1, 2 years in 1st .Gr.	After 3rd Gr. has been 2 years in ungraded class; lies, smokes.
G. 26 (Sister of G. 44)	11:1	7	Ungr.	Mother, in U. S. 5 years, does not speak English. Sister, 8, B. S. 6^2, 1½ years in 1st Gr.; is a difficult child, considered defective by teacher.	After 1 year in 1st Gr. has been 2 years in ungraded class.
B. 55	13:8	9^2	Ungr.		After 4th Gr. passed into ungraded class.
B. 56	13:9	9^2	5		2 years in 5th Gr.; smokes constantly.
B. 57 (Brother of B. 80)	14:0	9^1	5	Mother very ignorant. Father has deserted family. Brother, 10:3, B. S. 7^2, in 3rd Gr. Brother, 15, very slow, is at work.	
G. 27 (Sister of B. 93)	13:9	8^3	5	Brother, 11:8, B. S. 8^3, in 3rd Gr.	Has been kept at home to look after baby.
G. 28	13:1	8^3	4		2 years in 2nd Gr., 1 year in 3rd Gr.
B. 58 (Brother of B. 72)......	13:11	9	Ungr.	Mother (American) can neither read nor write, married at 16, had 15 children, 5 of whom died from convulsions in infancy. Brother, 10:10, B. S. 9^2, 2 years in 3rd Gr. Brother, 8:5, B. S. 7.	Active, quarrelsome, lies, smokes; was ½ year in 5th Gr.
G. 29	7:7	5^3	1	Father alcoholic.	Defective teeth; defective speech; untruthful; 3 years in 1st Gr., has run away repeatedly; considered defective by teacher and special worker.

Table IV—Group C—*Concluded*

Name	Age	Binet-Simon	Grade	Heredity	Other Data
B. 59	14:3	9^1	5	Brother, 11:7, B. S. 9^2; defective speech, neurotic.	Defective speech.
B. 60	14:8	9^4	7	Mother alcoholic.	
B. 61	13:11	8^3	7		
B. 62	14:4	9^1	5	Father alcoholic.	
G. 30	12:6	7	4		
B. 63	14:0	9^2	5	Brother, 11:8, B. S. 9^4, in 5th Gr.	
G. 31	12:7	8^4	3		Polish is spoken at home.
B. 64	7:9	4^3	1		
G. 32 (Sister of B. 20)	12:5	9^3	3	Mother immoral. Brother, 11:4, B. S. 7, in 1st Gr.	
G. 33	12:3	9^1	3		Neurotic.
G. 34	10:4	7^1	2	Sister, 11:7, B. S. 9^3.	
B. 65	10:4	7	2		
B. 66	11:8	7^4	2	Brother, 13:7, B. S. 10^3, 6th Gr.	

What is immediately evident from the above tables is that throughout the first five grades there is a large number of subnormal children who tend to waterlog the classes. The fact that some of these children progress so far in the grades is explained by the general school rule that after two years in one grade a child, even although unable to pass that grade, is promoted to the next grade. This somewhat perplexing rule to try the child on the more difficult, if he fail on the easier tasks, may have some justification in the hope that the personality of another teacher and the stimulus of a new grade may arouse dormant powers.

The abrupt drop in the numbers of the sixth grade from those of the fifth is explained by the economic conditions of the district. A boy of fourteen who has passed the fifth grade is entitled to a permit to work, and therefore a large proportion of the children do not go beyond the fifth grade.

As to the classes composed entirely of subnormal children one class is specially organized to meet the needs of these children, and is referred to as the "special " class; the other class is termed the ungraded class. In the tabulation of the individual cases, no distinction has been made between these two classes (Tables I to IV). In each public school there is an ungraded class, a collection of heterogeneous nuisances, who are placed there in order to relieve the ordinary grades of their presence and without any systematic attempt being made to estimate the factors involved in each individual case. The needs of these children are not specially considered, no attempt as a rule is made to equip the classes in relation to their needs, and the teachers are not trained to deal with the special problems of such a class; it is true that several of the teachers of their own initiative have taken advantage of the meagre opportunities which Baltimore offers for the systematic study of the subnormal child and his training.

In the parochial school all the pupils were examined by the Binet-Simon scale. Chart 4 shows the distribution of the children according to grades and "intelligence" level; Chart 5 shows the distribution throughout the grades of those "mentally retarded" children, who in view of other data available were considered to be subnormal and to have special requirements.

Table V—Distribution throughout the grades of the children with "mental retardation," Public school 76, Baltimore, Md., May, 1914

Years retarded	Number of Children Retarded											
	Total	Kinder-garten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Special class	Ungraded
1	113	4	31	16	31	18	10	2				1
2	107	1	21	23	17	23	14	4	1		1	2
3	66		6	5	13	13	16	3	1		1	8
4	31			1		8	7	1	1		6	7
5	15		2			3	3				3	4
6	4										2	2
7	2										1	1
8	1				1							
9	1										1	
Total found retarded	340	5	60	45	62	65	50	10	3		15	*25
Total in school	764	45	150	126	121	109	98	39	28	11	16	*21

*Five of the twenty-six children examined had left the school before May, at which date the school census was 764.
These results are shown graphically in Chart 1.

Table VI—Distribution throughout the grades of those children with "mental retardation" who were considered subnormal and with special requirements, Public school 76, Baltimore, Md., May, 1914

Years retarded	Number of Children Considered Subnormal and with Special Requirements											
	Total	Kinder-garten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Special class	Ungraded
1	26	4	10	2	9							1
2	34		10	13	7		1				1	2
3	38		3	4	11	7	3	1			1	8
4	23			1		7	2				6	7
5	15			2		3	3				3	4
6	4										2	2
7	2										1	1
8	1				1							
9	1										1	
Total subnormal	144	4	23	22	28	17	9	1			15	*25
Total in school	764	45	150	126	121	109	98	39	28	11	16	*21

*See footnote, Table V.
These results are shown graphically in Chart 2.

Table VII—Distribution in the school grades of the different groups of subnormal children, Public school 76, Baltimore, Md., May, 1914

Subnormal group	Number of Subnormal Children										
	Total	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Special class	Ungraded
A	22		1	3	1						11	6
B	63	1	11	10	7	7	4				4	19
C	59	3	11	9	20	10	5	1				
Total	144	4	23	22	28	17	9	1			15	25*
Total in school	764	45	150	126	121	109	98	39	28	11	16	21*

*Five of the twenty-five children examined had left the school before May, at which date the school census was 764; with regard to one additional child in the ungraded class, certainly subnormal, the data were inadequate for further classification.

These results are shown graphically in Chart 3.

Table VIII—Distribution throughout the grades of the children with "mental retardation," Parochial school, Baltimore, Md., Oct., 1914

Years retarded	Number of Children with "Mental Retardation"									
	Total	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
1	100	7	26	17	14	12	6	9	8	1
2	52	2	6	7	2	7	11	3	12	2
3	26		4	3	3		5	4	2	5
4	10		1	1	1	1	2	1	1	2
5	8			2		1	2		2	1
Total retarded	196	9	37	30	20	21	26	17	25	11
Total in school	463	68	110	65	55	40	40	38	31	16

These results are shown graphically in Chart 4.

Table IX—Distribution throughout the grades of those children with "mental retardation" who were considered subnormal and with special requirements, Parochial school, Baltimore, Md., Oct., 1914

Years retarded	NUMBER OF CHILDREN CONSIDERED SUBNORMAL AND WITH SPECIAL REQUIREMENTS									
	Total	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
1	1		1							
2	3			3						
3	8		3	3	2					
4	6		1	1	1		2			1
5	8			2		1	3		2	
Total subnormal	26		5	9	3	1	5		2	1
Total in school	463	68	110	65	55	40	40	38	31	16

These results are shown graphically in Chart 5.

Table X—Distribution in the school grades of the different groups of subnormal children, Parochial school, Baltimore, Md., Oct., 1914

Subnormal group	NUMBER OF SUBNORMAL CHILDREN									
	Total	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
A	2			2						
B	16		2	4	3	1	4		2	
C	8		3	3			1			1
Total subnormal	26		5	9	3	1	5		2	1
Total in school	463	68	110	65	55	40	40	38	31	16

These results are shown graphically in Chart 6.

SUMMARY

The treatment of the subnormal child consists above all in giving him a training suited to his constitutional limitations. In Baltimore such training is at present available for only a handful of the subnormal children; the others rub along at school in the ordinary grades, where they interfere seriously with the teaching of the normal children, or they are found in ungraded classes where the "school nuisances" accumulate.

The neglect of the training of the subnormal child has serious social and economic results; subnormal children are potential dependents on society and recruit the ranks of the paupers, the vagrants, the drunkards, the prostitutes and the delinquents. Such end-products, the result of the difficulty of adjustment of these individuals to their environment, are partly due to the absence of suitable training during the school period.

Assuming that the present type of school training is satisfactory for the normal child, how many children are there who through constitutional inferiority are unable to benefit by it, and require a special form of training?

The present survey was undertaken to get some data which would help to furnish an answer to this question; in one district the school population was reviewed and the number of children with special requirements enumerated. This district is not to be considered as typical; it is of a very low social and economic level, and has a very large foreign population.

Out of a school population of 1,281 children, 166 children were found to have special requirements on account of their mental constitution.

The data with regard to these children are briefly tabulated, and they can be grouped according to the special point of view of the individual worker.

The following classification was adopted as being the most useful in relation to the present situation in Baltimore.

Group A: Twenty-two children showed a pronounced mental defect, which eliminated any prospects of their becoming self-supporting. In the absence of exceptionally favorable home conditions, training in a suitable institution would be best for these children; in view of the limited accommodations of existing institutions, these children remain a problem for the school system. Their training should be of a simple and concrete nature; good conduct and simple manual ability are the main objects to be aimed at.

Twelve children of Group B might well be included along with these 22 children, but the grouping has been made as conservative as possible.

Group B: Seventy-eight children showed a degree of mental defect less pronounced than that of the children in Group A, but so definite that their special requirements can hardly be debated. The nature of the training received by these children during the school period will have much to do with their social adaptability as adults; neglect by the community of their problems will increase the number of adult dependents.

Group C: Sixty-six children were sufficiently handicapped mentally for some modification of the usual curriculum to be distinctly indicated. These children, too, are liable to recruit the ranks of the dependents and this chance is increased considerably by the lack of suitable training during the school period.

Group D: One thousand one hundred and fifteen children seemed sufficiently well equipped mentally to digest the ordinary school curriculum.

Instead of using as a unit of comparison the 1,281 school children of the district, with their heterogeneous data, it may be more satisfactory, at least with regard to Groups B, C, D, to use the 764 children of the Public School, with regard to whom the data were more uniform. These children were distributed as follows:

Group A: Twenty-two children. This large number is due to the distribution of this type of children in the different schools; with regard to Group A, 22 children out of a total school population of 1,281 gives the real proportion in the district. *Group B:* Sixty-three children; *Group C:* Fifty-nine children; *Group D:* Six hundred and twenty children. The accompanying tables show the distribution of these children throughout the grades.

In order to train satisfactorily the children of the community the school authorities would require (1) to have an approximate idea of the composition of the school population, with some realization of the prospective adult level of the various groups; (2) to adapt the methods of training to the special requirements of the various groups; (3) to equip the schools and to train teachers so that the appropriate methods can be carried out.

The details of organization, the comparative merits of special classes and special schools and the kind of training best adapted to the needs of special groups have to be determined after acceptance of the above general principles.

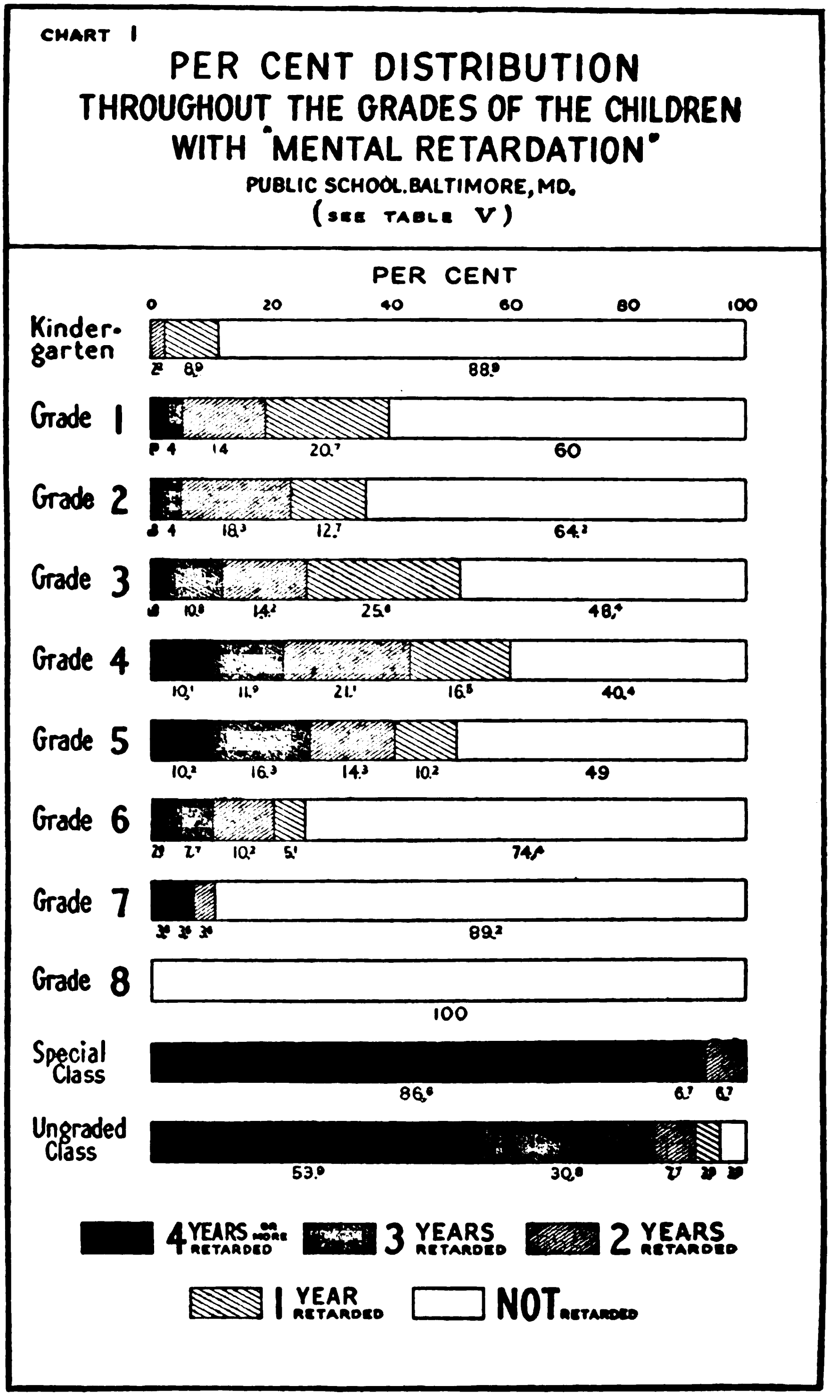


CHART I

PER CENT DISTRIBUTION
THROUGHOUT THE GRADES OF THE CHILDREN
WITH "MENTAL RETARDATION"
PUBLIC SCHOOL, BALTIMORE, MD.
(SEE TABLE V)

CHART 2

PER CENT DISTRIBUTION THROUGHOUT THE GRADES OF THOSE CHILDREN WITH "MENTAL RETARDATION" WHO WERE CONSIDERED SUBNORMAL AND WITH SPECIAL REQUIREMENTS

PUBLIC SCHOOL, BALTIMORE, MD.

(SEE TABLE VI)

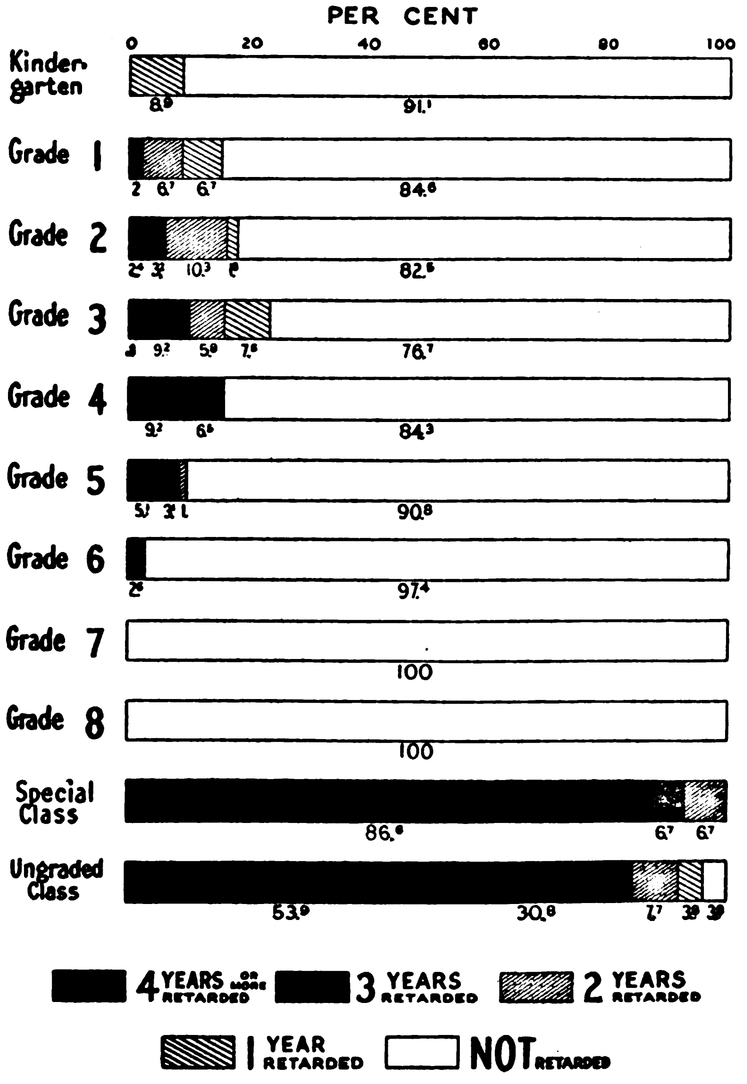
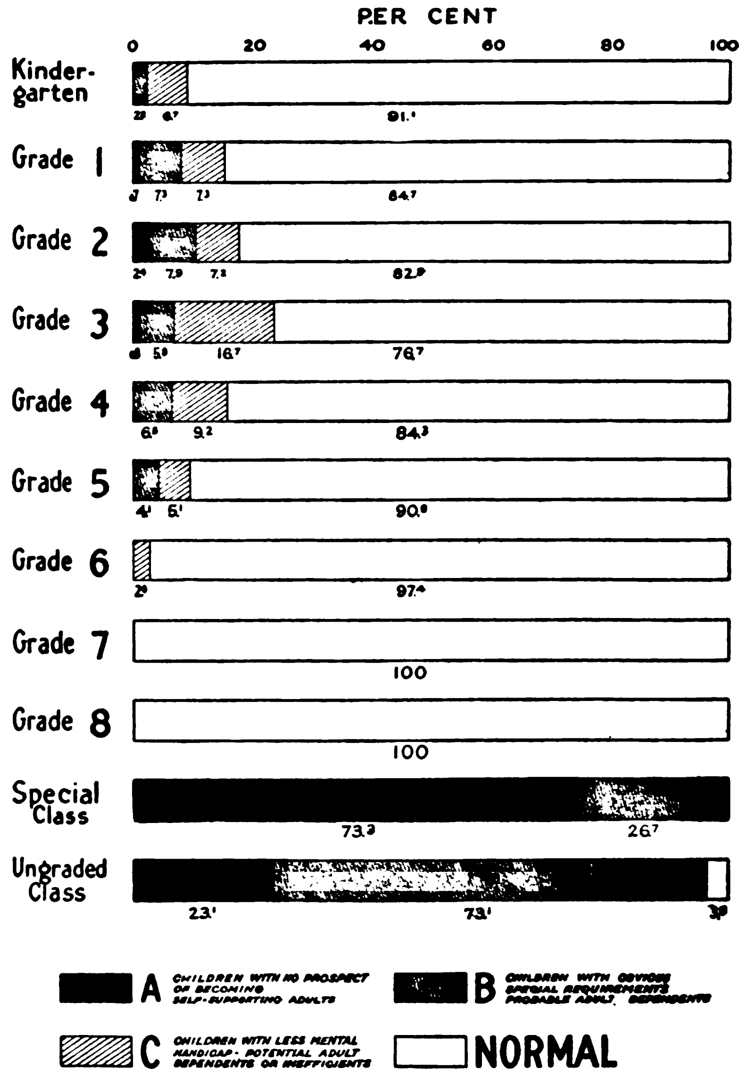


CHART 3

PER CENT DISTRIBUTION IN THE SCHOOL GRADES OF THE DIFFERENT GROUPS OF SUBNORMAL CHILDREN

PUBLIC SCHOOL, BALTIMORE, MD.

(SEE TABLE VII)



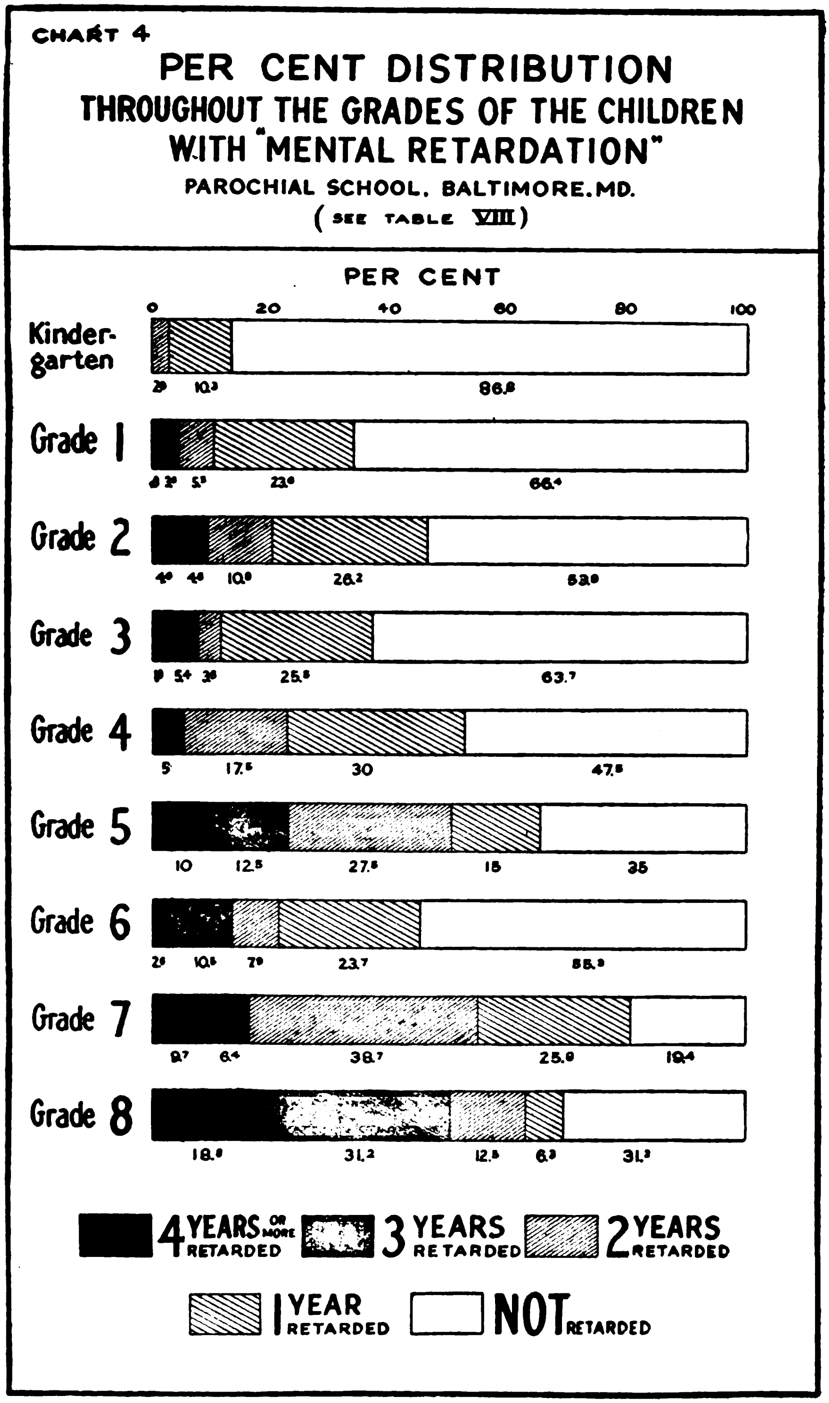


CHART 4

PER CENT DISTRIBUTION THROUGHOUT THE GRADES OF THE CHILDREN WITH "MENTAL RETARDATION"

PAROCHIAL SCHOOL, BALTIMORE, MD.

(SEE TABLE VIII)

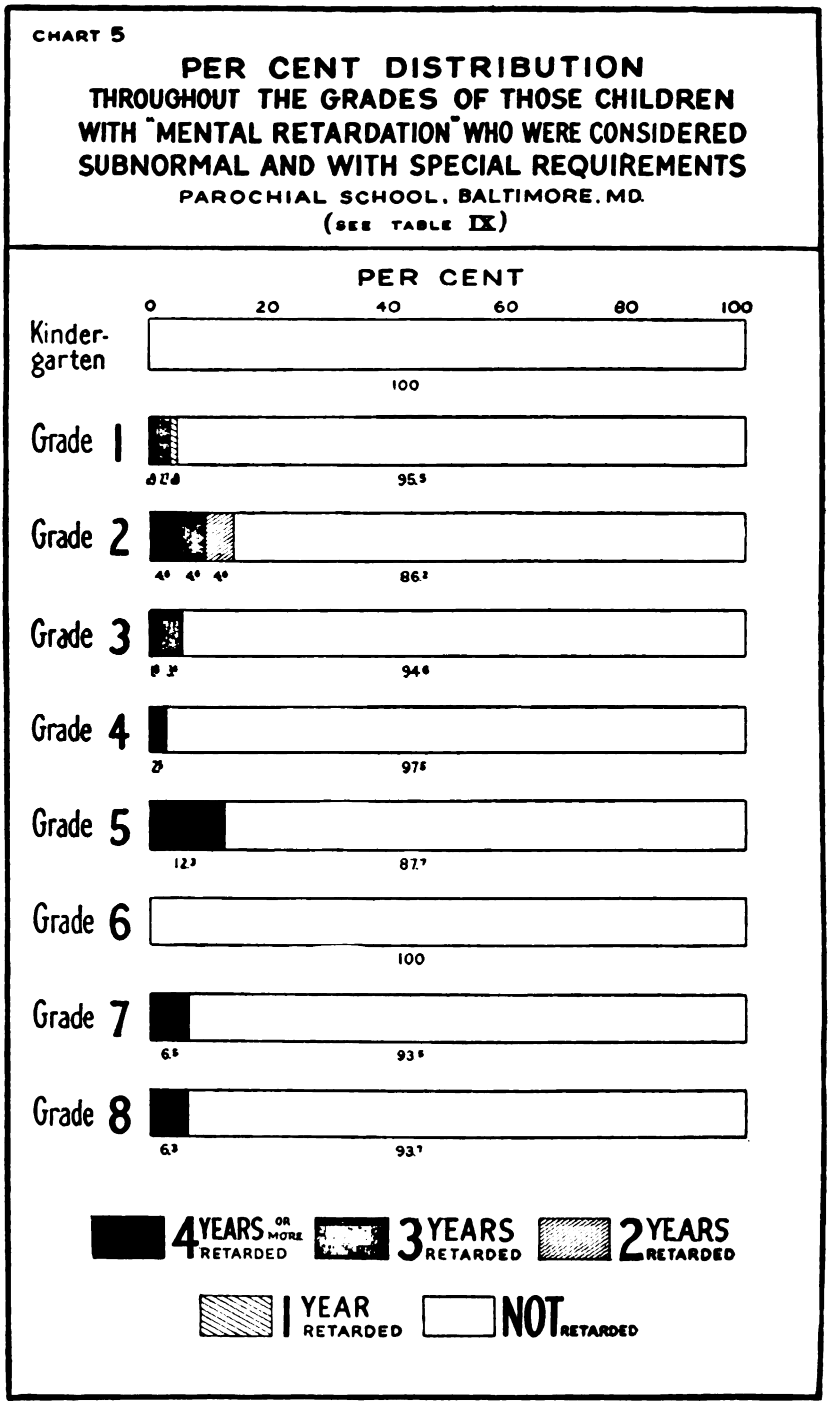


CHART 5

PER CENT DISTRIBUTION THROUGHOUT THE GRADES OF THOSE CHILDREN WITH "MENTAL RETARDATION" WHO WERE CONSIDERED SUBNORMAL AND WITH SPECIAL REQUIREMENTS

PAROCHIAL SCHOOL, BALTIMORE, MD.

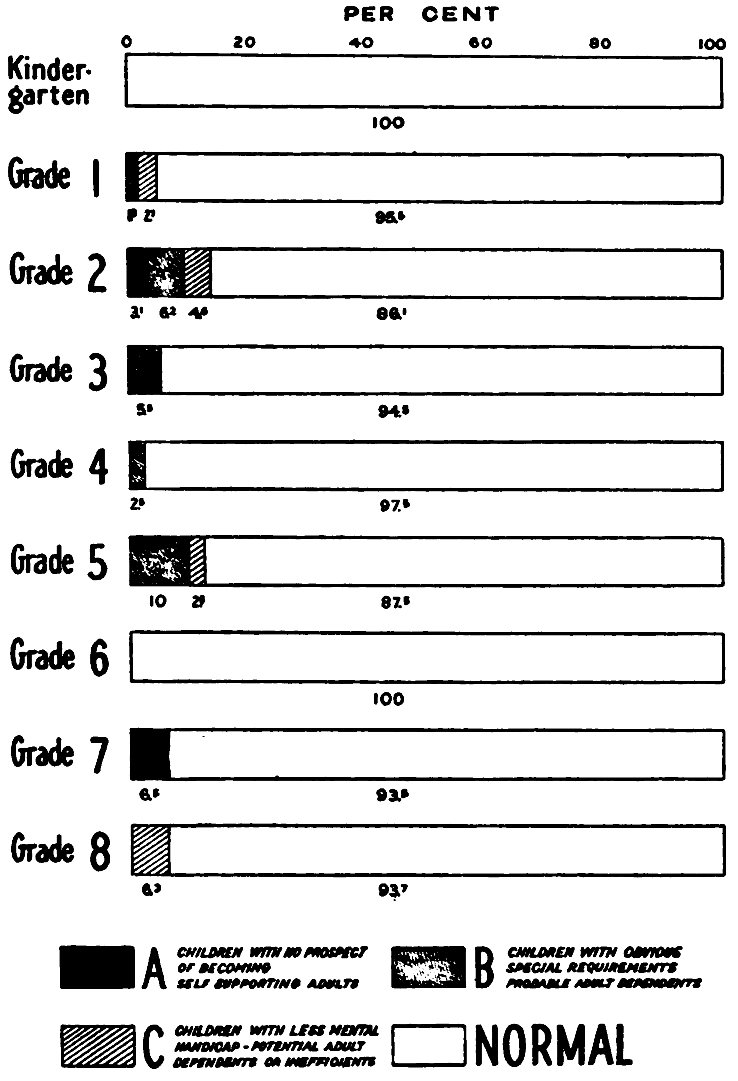
(SEE TABLE IX)

CHART 6

PER CENT DISTRIBUTION IN THE SCHOOL GRADES OF THE DIFFERENT GROUPS OF SUBNORMAL CHILDREN

PARUCHIAL SCHOOL, BALTIMORE, MD.

(SEE TABLE X)



BOOK REVIEWS

THE MENTALITY OF THE CRIMINAL WOMAN. Educational Psychology Monographs No. 14. By Jean Weidensall, Ph.D. Warwick & York, Baltimore, 1916. $1.75.

This book is another valuable contribution to the rapidly growing literature of the psychopathology of crime.

It gives an admirable comparative study of the criminal woman, the working girl, and the efficient working woman in a series of mental and physical tests. The mentality of a representative group of women has been measured by a fairly large number of tests, in a number of which the results have been checked in terms of a reliable set of norms—those for the working girl of Cincinnati. Of the 88 Bedford Reformatory women used in the percentile tables and curves, it is interesting to note that one group of this number has clustered about the better end of the standard curve, and another group about its poorer end. Those who had accomplished the completion of at least 5 B grade in the public schools formed a curve which paralleled very closely that of the Cincinnati girl of fifteen, while those who had not succeeded in passing 5 B comprised the majority of those who collected at the poorer node of the Bedford 88 curves.

The industrial and social history of twenty college girls of the age of twenty-one years was obtained, eighteen of whom were given mental tests and a comparison made with the 88 women from the Bedford Reformatory, and the working girl of fifteen years.

In height, the Bedford 88 are shorter at all three percentiles than the working girl of fifteen. The grade group are taller than the below grade group; they are taller than the working girl of fifteen at the 25th percentile, but not at the median or 75th percentile. The Bedford 88 are decidedly heavier than the working girl of fifteen, and heavier also than the normal woman of corresponding age.

In steadiness of hand, both the below grade group and the grade group are markedly superior to the working girl of fifteen. Seventy-five per cent of the Bedford 88 were as precise in their movements as the average working girl. This same unimaginative insensitivity to possible accident characterizes their work in factories when they operate unguarded and dangerous machines. They may be in continuous danger because of their clumsiness and inattention, but only infrequently because of loss of control resulting from fear. In this they differ radically from university students when facing the same type of situation.

The test given for cancelling letters is not unlike the work in a factory of inspecting garments, or the labels on dishes or handkerchiefs where the operator's task is to set aside or check off all the defective ones. The card-sorting test is quite like sorting samples or packing playing cards.

In the cancellation of letters, the Reformatory group is more accurate for the most part than the standard group—in this instance the working girl of fourteen. Nearly one-half cancel at least as many of the *a's* as does the working girl.

In card sorting, the Bedford 88 again prove as accurate as the working girl, the dullest individual being able to sort 81.3 per cent of the cards accurately. When efficiency, however, is measured in terms of speed, they are less efficient than the working girl of fifteen.

Sixty per cent of the Bedford 88 write at least as many sentences correctly as the median working girl of fifteen; 48 per cent writeas many as the best quarter of the standard. Over 75 per cent of the grade group are better than the median standard record. The below grade group and the grade group scores overlap scarcely at all; more than 75 per cent of the former group write more incorrect sentences than does the individual that marks off the poorest quarter of the latter.

When the mentality of the criminal women is measured by the number of tests in which their ability is at or above that of the median working girl of fifteen, about a third of them (35 per cent) fall within the range of the better 50 per cent of the working girls of fifteen, about two-thirds below the median, 54 per cent poorer than all but the poorest 25 per cent of the standard, 30.7 per cent as poor as the poorest 5.7 per cent, and 17 per cent poorer than any of the working girls.

The author states, "I suspect that from 15 to 20 per cent of women such as are sent to Bedford equal the average of the better type of saleswoman in ability, that another 25 per cent equal the average housemaid or laundress, and that the others are inferior to the average even of yet less skilled workers."

Think when you work is the burden of the teaching in the Reformatory school. The main endeavor is to teach these women who have hitherto not learned at all or learned to perform each new task without comprehension, that their work will be made easier by forethought and by considering how best they may accomplish it. After a few months in school, results appear, and the women begin to do everything better, even new things they have never done before. This, then, is the fruit of bringing to their unalert consciousness, by emphasis and repetition the methods of successful work,—to think and plan out when trying to do anything new. The method has worked so well in the training and development of women already convicted of crime that those in charge of the classes for defective children in our public schools may well expect to train some of this type, while they are yet children, to be more efficient and thus to minimize that portion of crime that is due merely to lack of training and failure to analyze situations. This method will tend to lessen the number of those who must be classified as feeble-minded if required to learn at the average normal rate, of whom not a few are certain to develop and become reasonably efficient when given special training.

Whatever hope there may be of the development and reformation of these women lies in the firm establishment of saner habits of conduct and in cultivating to the utmost the intelligence which they have. They are unresisting and willing to learn whatever one wishes to teach them. The same happy-go-lucky capacity to accept unreflectively each day's events as they come is, however, the real obstacle that one meets in the task of reformation. When restored to their former environment the habits they had previously formed will tend strongly to tempt them back to their former ways of living.

On the whole, it is rather encouraging that so many of them in eighteen months learn to be more scrupulous in matters of personal cleanliness, to develop enough resources within themselves to enjoy being alone at times, to be responsible in the face of considerable difficulty for some one piece of work, to sew, to mend and to keep regular hours. It is no less encouraging that to so many there comes some perspective and some realization of the fact that freedom does involve responsibility, that every privilege exacts some service rendered. As the work has proceeded, the author has felt increasingly sure that it would have been true for a much higher per cent if each girl could be put through a careful examination in a clearing-house at the time of her first offense, sentenced in accordance with her needs and capacities, and then have been followed up until each had received in the community the discipline and the training found to be essential to the development of her self-control, industrial efficiency and good citizenship.

The results that may be obtained by the newer methods of handling the criminal type of woman make us very keenly aware that the old order of disciplinary treatment must make way for the more thorough, efficient and comprehensive manner of dealing with these individuals, as so excellently set forth in this study.

L. PIERCE CLARK, M.D.

MECHANISMS OF CHARACTER FORMATION. An Introduction to Psychoanalysis. By William A. White, M.D. The MacMillan Company, New York, 1916. $1.75.

The belief has often been expressed by those who are engaged in the study of mental disorders through the psychoanalytical approach that the new and powerful resources which they have been applying to difficult problems in psychopathology might be used with far greater advantage to mankind in the upbuilding of character and the widening and strengthening of normal mental life. The task of indicating what might be accomplished in this most important field of mental hygiene presents formidable difficulties; nevertheless, White has gallantly undertaken the enterprise. In the opinion of those who are familiar with the great issues dealt with, he has achieved a notable success.

This book bears a more important relation to the psychoanalytic movement than its subtitle indicates. It is not concerned with specific applications of the psychoanalytic principles and modes of interpretation in the relatively narrow field of psychotherapeutics nor even with their definite utilization in other fields of social service. Its scope is wider and its aim is even higher, for it serves to bring the thoughtful reader to the attitude of genetic interpretation of the individual character and its relation to life. Such a study has been made possible because of the empirical handling of human problems in psychoanalytic therapy but the profound discoveries and the far-reaching conceptions in the treatment of mental disorders which have resulted express themselves here as parts of the great dynamic whole, which is human life.

The aim of the author has been to present man not as something apart from his environment but "as a bit of that life which expresses itself in all living beings." He therefore begins by comparing the genetic approach to the study of human character with the older, purely descriptive methods which failed to discover the determining history of psychic events and therefore to give them meaning. The newer method, on the contrary, traces the constant interplay between the individual and his environment as he seeks his necessary self-expression along gradually advancing levels of reaction from the lowest physical level where integration and adaptation had their beginnings to the complex of mechanisms and compromises which are manifest in the psychic realm.

This necessitates a workable hypothesis for explaining hitherto inexplicable mental phenomena. Such an hypothesis is the conception of a rich, unconscious life. Of a greater part of the mental life we are not aware. A certain portion of psychic events lies merely in the fore-conscious, out of consciousness but easily accessible to it. By far the greater part of mental life, however, has been relegated to the unconscious in the course of development, because individual modes of reaction based upon desires, upon the pleasure principle, are not compatible with social environment. As the individual developed, these reactions had no place in the new adjustments constantly demanded. The unconscious is our historical past representing the psychological path of gradual advance through which we have passed on the road to a more effective adjustment. Consciousness represents the point of conflict when a new adjustment is demanded but the intellectual activity of consciousness is enriched and modified by the influence of the essentially emotional content of this unconscious past which follows like the steadying tail of a kite.

The wish tendency of the unconscious, however, comes into inevitable conflict with the conscious necessity of adjustment. This is merely an expression of the universal "ambivalency" through which all progress is the result of the meeting of opposing tendencies, in which now one, now the other, gains the ascendancy. It is in fact the means by which energy attains higher levels of expression.

The fundamental difference in quality between the unconscious and the conscious makes it necessary that the former should express itself to consciousness in symbolic language. White's discussion of symbolism reveals its universal character and its recognized conscious employment. It has a special service, nevertheless, in evading the resistance opposed to unconscious expression, permitting this in an indirect and compromise fashion. The phylogenetic history of the symbol discovers it as the carrier and transmuter of energy upon psychical levels just as the acids, bases or hormones are distributors of energy at the physicochemical level of animal reaction and the reflex at the sensorimotor level. The symbol is the tool for transferring the energy from a lower unconscious stage of psychic reaction to be redistributed at the higher adaptation in which consciousness is concerned.

This necessitates further the consideration of the dream in order to understand the mechanisms utilized at the psychic or symbolic level and in order to attain the necessary integration and adjustment of the psyche. The dream, as a product of the unconscious striving, illustrates its peculiar modes of activity and also presents the individual conflict, not only the wish element which represents the pleasurable or infantile aspect of the conflict, but also the teleological reaching out to a resolution of the same.

Fundamental in the play of forces which make for the individual conflict is the so-called "Family Romance" which represents concretely the basic nature of the universal struggle. This is that of the individual's adaptation to the world of reality and conquest of it through detachment from his infantile moorings, with the security and pleasures which have been his and which he would retain. The universality of this basis of conflict is attested by primitive exogamous laws against incest and by the presence of this theme in all mythology and in literature to the present day.

The conflict as it manifests itself rests upon the infantile and primitive conceptions which substitute for effectual dealing with reality the attainment of power through magic, omnipotence of thought, or of gestures or other activities. It is a sense of the all-powerfulness of the ego, the infantile way of expressing the creative energy of the libido which is the ever present will to power. This manifests itself in the early stages of development in partial libido strivings. These in the immature individual are not yet integrated into the full concentration of the adaptation to reality. Any one of these partial libido trends may become overemphasized and therefore supreme at the expense of the complete adult development.

Failure or success in development may be summed up in two main aspects in which this libido or energy striving manifests itself. Those who find their interest within the ego, who reflect the world only in themselves, are of the introverted type. Like the child and the savage they fail to differentiate sharply between self and the environment and so to attain to that complete reality which belongs to the extroverted type, whose libido flows outward and attaches itself to the external world with which it must deal. These ambivalent tendencies, however, in the individual as in the larger society must supplement one another for the fullest life.

White discusses Adler's theory of organ inferiority as a basis for the interference of any partial libido striving with the integration of the individual and the compensatory reaction of the psyche to such inferiority. This concept is a valuable one for understanding the inner meaning of symptoms and yet it is surpassed in therapeutic and interpretative value by the dynamic concept of libido striving and its possibility of direction to higher levels and larger aims.

The chapter on "The Resolution of the Conflict" points out more clearly the two trends of the libido, the regressive and the progressive. The one is constructive, leading to fulfillment, life, immortality; the other is destructive, ending in dissatisfaction, failure, death. The conflict therefore exhibits these two tendencies as it is symbolized in symptoms or in dreams which introduce elements belonging to both the regressive and the progressive trends. The final resolution of the conflict on this account can never be reached except at a higher level, "in an all-inclusive synthesis which lifts the whole situation to a level above that upon which the conflict arose." This is possible through the adjustability of the symbol as the energy carrier and transmuter.

This energetic approach to the problem of individual success or failure in the necessary adaptation to life and its living affords a most comprehensive view of the whole problem. Moreover, it offers the one effectual way of meeting failure and redirecting the effort, the energy, to an adequate readjustment, while it also points out the pitfalls along the way of full integration and success. The author's wide survey of the field already opened and explored by psychoanalysis and his correlation of this material discovered in the psychical realm with advances made on the physical side of the problem, make the book one of widest interest and help to dissolve that false distinction between psychical and physical phenomena which has been responsible in part for the failure to appreciate and understand the genetic unity of life.

SMITH ELY JELLIFFE.

DIRECTORY OF SOCIETIES AND COMMITTEES FOR MENTAL HYGIENE

(Listed in the order of their origin)

THE CONNECTICUT SOCIETY FOR MENTAL HYGIENE
(Organized, May, 1908)
39 Church Street, New Haven, Conn.
Miss V. M. Macdonald, *Secretary*
Miss Inez Newman, *Associate Secretary*

THE NATIONAL COMMITTEE FOR MENTAL HYGIENE, INC.
(Organized, February, 1909)
50 Union Square, New York City
Dr. Thomas W. Salmon, *Medical Director*
Dr. Frankwood E. Williams, *Associate Medical Director*
Clifford W. Beers, *Secretary*

THE ILLINOIS SOCIETY FOR MENTAL HYGIENE
(Organized, July, 1909)
157 East Ohio Street, Chicago, Ill.
Miss Elnora E. Thomson, *Superintendent*
Mrs. Eleanor C. Slagle, *Director of Occupations*

COMMITTEE ON MENTAL HYGIENE OF THE NEW YORK STATE CHARITIES AID ASSOCIATION
(Organized, May, 1910; an outgrowth of an After-care Committee, organized in 1906)
105 East 22nd Street, New York City
George A. Hastings, *Executive Secretary*
Miss Jessie Taft, *Social Service Director*

THE MASSACHUSETTS SOCIETY FOR MENTAL HYGIENE
(Organized, January, 1913)
15 Ashburton Place, Boston, Mass.
Dr. Charles E. Thompson, *Secretary*

THE MENTAL HYGIENE SOCIETY OF MARYLAND

(Organized, March, 1913; an outgrowth of an After-care Committee, organized in 1911)

401 Garrett Building, Baltimore, Md.
Dr. Charles B. Thompson, *Executive Secretary*

THE COMMITTEE ON MENTAL HYGIENE OF THE PUBLIC CHARITIES ASSOCIATION OF PENNSYLVANIA

(Organized, March, 1913)

Empire Building, Philadelphia, Pa.
Robert D. Dripps, *Executive Secretary*

THE NORTH CAROLINA SOCIETY FOR MENTAL HYGIENE

(Organized, December, 1913)

Dr. Albert Anderson, *Secretary*, Raleigh, N. C.

THE DAYTON MENTAL HYGIENE COMMITTEE

(Organized, March, 1914)

Address: Mrs. J. Franz Dolina, or Mr. A. G. Knebel, Dayton, Ohio

THE SOCIETY FOR MENTAL HYGIENE OF THE DISTRICT OF COLUMBIA

(Organized, April, 1915)

Dr. D. Percy Hickling, *Secretary*
1305 Rhode Island Avenue, Washington, D. C.

THE ALABAMA SOCIETY FOR MENTAL HYGIENE

(Organized, April, 1915)

Dr. W. D. Partlow, *Secretary*, Tuscaloosa, Ala.

THE LOUISIANA SOCIETY FOR MENTAL HYGIENE

(Organized, May, 1915)

Dr. Maud Loeber, *Secretary*
1729 Marengo Street, New Orleans, La.

THE CALIFORNIA SOCIETY FOR MENTAL HYGIENE

(Organized, June, 1915)

Miss Julia George, *Secretary*
638 Phelan Building, San Francisco, Cal.

THE RHODE ISLAND SOCIETY FOR MENTAL HYGIENE
(Organized, March, 1916)
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335 Angell Street, Providence, R. I.

THE OHIO SOCIETY FOR MENTAL HYGIENE
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THE TENNESSEE SOCIETY FOR MENTAL HYGIENE
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Nashville, Tenn.

THE MISSOURI SOCIETY FOR MENTAL HYGIENE
(Organized, May, 1916)
Dr. Francis M. Barnes, Jr., *Secretary*
Humbolt Building, St. Louis, Mo.

THE INDIANA SOCIETY FOR MENTAL HYGIENE
(Organized, October, 1916)
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MENTAL HYGIENE

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EDITORIAL

A LARGER VIEW OF MENTAL HYGIENE WORK

EVERY social worker feels the need of identifying his particular task with the widest range of human interests. He is quite willing to do his job intensively and with all his might but at the same time he likes to see that it has some direct and important relation to the great currents of human thought and of human affairs. If he does not see such a relation, he may find his interest in his particular job submerged in his longing for a more direct connection with those larger things in which he has not the zest of seeing and feeling himself a participant.

Although its boundaries are being rapidly extended, mental hygiene is an intensive field and its subject matter is relatively little understood. It needs, above all, intensive study and intensive treatment. Those who devote themselves to intensive study and intensive work in mental hygiene may well feel, however, that theirs is the opportunity to make a vital contribution to the most fundamental currents of human thought and human activity. These fundamental currents of thought and activity group themselves about one underlying question—the relative importance to be attached, on the one hand, to inherited traits and to personal development from internal factors; and, on the other hand, to the moulding force of environmental factors, above all, that of the community life. Both in the field of research and in the field of action, this is the underlying cleavage. It is, of course, perfectly obvious that in the field of thought the advocates of neither point of view have a monopoly of the truth, and that in the field of action neither side has a monopoly of the right. Little by little, however, the facts become clearer; step by step a wiser and more constructive public policy is being evolved.

The mental hygiene worker is in a position to make a vital contribution to this process. The human phenomena with which he deals are so obviously beyond the understanding of the average man that he is willing to take the expert's word for it, to accept and act upon the final conclusions of the specialist. Accurate knowledge of the extent to which those unusual human phenomena with which the mental hygiene worker deals are the outcome of inherited personal, individual qualities and the extent to which they are either produced or modifiable by physical and social environment will throw a flood of light upon obscure fields of research and reflection, and also upon many a practical problem with which public bodies, national, state and local, are dealing. It is difficult to think of any part of the field of human knowledge, or of any phase of the struggle for the betterment of human affairs, which will not be clarified by the light which can come only from the patient study, and the no less patient work, of those who have chosen to labor in the field of mental hygiene.

WILLIAM MABON

February 9, 1917

NO larger aggregations of the sick are to be found than in our great public hospitals for the insane and no members of the medical profession are called upon to bear a heavier burden of responsibility than the physicians who direct these institutions. To humanity and to their branch of science these men are responsible for the maintenance of high standards in a field where extraordinary difficulties exist. To the state they are responsible for the efficient and economical administration of its most important trust.

The physicians who have been conspicuously successful in this work are, without exception, men who by reason of their native endowments would have succeeded equally in any field of effort requiring a high degree of executive ability and a deeply-rooted sense of public obligation. It is to their work that the firm establishment of state care of the insane in this country is due. When the hope arose of dealing with mental disorders in their earlier phases in the community, the superintendents of these hospitals led the way in work which has shown that this hope can be realized. When it became apparent that measures of prevention might be successfully applied in mental disease, it was the testimony of these men to its need and practicability that led to public confidence in the new enterprise to which the term mental hygiene has been applied.

Dr. Mabon was the acknowledged leader among the great hospital administrators in this country and he was one of the very first to give his prestige and his earnest personal efforts to the organized work instituted by the National Committee for Mental Hygiene. As a member of the Executive Committee he had a large share in shaping its policies. With the development of opportunities for useful work in many different directions, his voice was always for accepting responsibilities and confidently undertaking new tasks in spite of their difficulty. Much of the work of the National Committee is in entirely new fields in which success is by no means certain but, invariably, when a new opportunity presented itself, it was Dr. Mabon's advice to make careful plans and then boldly to go ahead.

Of Dr. Mabon's life and of his services to his state there is no space here to speak. The story of his life would be the story of the progress made in the care of the insane during the last thirty years. There is not a single feature in the hospitalization of the institutions, reform in the laws which influence commitment and treatment, and extension of work into the community in which Dr. Mabon did not have a leading part. He was skilful and tactful in dealing with public officials but unswerving in his opposition to any attempt to lower standards of care or treatment. He was particularly a friend to young physicians and his encouragement and example have led many of the best men in different states to take up the care of mental diseases as their life work.

When the legislature adjourned out of respect to Dr. Mabon, upon receipt of news of his death, a fitting tribute was paid to a man who gave the best that was in him to the service of his state. It has been said that when he died the insane poor of New York lost their best friend. However, the reforms in their treatment which he did so much to secure and the high level which he aided in establishing will continue for many years to determine standards in the treatment of mental disease not only in the state in which he lived and worked but in the wide field in which his influence was felt.

A YEAR IN PRISON FOR JUDGE AND PROSECUTOR

IN no other public institution are the mentally diseased more generally misunderstood and consequently more sadly neglected and even abused than in the penal institutions. Such work as that of Healy at the Psychopathic Institute of the Chicago Juvenile Court, of Guy Fernald at the Concord Reformatory, of Spaulding and Sullivan at the Sherborn Reformatory, of Anderson at the Boston Municipal Court, of Glueck at Sing Sing has demonstrated that the amount of mental disease in penal institutions is both large and significant. It is gratifying, therefore, to know that as Healy goes to Boston to continue his work in connection with the Boston Juvenile Court, Adler is to continue and to develop the work in Chicago; that the psychiatric work is to be extended at the Bedford Hills and at the Sherborn Reformatories; that mental clinics have been opened at the New York Police Headquarters, at the New York City Juvenile Court, at the penitentiary and work-house on Blackwell's Island, at the Charlestown, Massachusetts, State Prison, and that mental clinics are planned in the reorganization of the Trenton, New Jersey, Penitentiary. Without question, there should be a psychiatrist in every state prison in the United States.

Attacking the problem from behind prison walls, however, is attacking the problem at a time when a solution promises least. A recognition of their mental condition in the public school, from which all prisoners but recently came, in the juvenile court, where many of them have had experience, while on probation, and most of them have been tried on probation, at the reformatory, where many of them have served their first sentences, or at the court where all have had their final—and probably, very hasty—hearing, would have given better opportunity for an intelligent adjustment that might have saved the present situation.

May it not be expected that the time will come when the judge who sits upon the criminal bench and the district attorney who prosecutes will no longer be men who are merely casually chosen for such positions but men who by special training will have measured up to some standard of expertness in other fields than that of law before they are permitted to assume such positions? The problems with which the judge of a criminal court and the prosecuting attorney have to deal are social as well as legal. Is it unreasonable to expect, therefore, that they should be equipped with a fundamental knowledge of sociology and with a more comprehensive understanding of the various factors involved in the problems with which they have to deal? The judge and the prosecutor are specialists in their profession. A medical graduate is not considered properly prepared to practice his profession until he has spent from one to two years in a well equipped hospital; a medical specialist—an orthopedist, a pediatrician—does not have standing in his specialty until he has in addition labored long in an orthopedic or pediatric clinic. A graduate of the law school who planned to enter upon the practice of criminal law could learn much of value in a year's time spent as a student in a penal institution.

IN PENNSYLVANIA

"*WHY should we now fasten upon the state a system of entire state care which has not been proven to be the best, only to find, perchance, in the near future, that it must all be done over?*" Such a statement from an isolated, uninformed, unprogressive community could be understood, but coming from an official board in Pennsylvania it is inexplicable. Does Pennsylvania realize that in this matter of county care she occupies a most unenviable position? There are only eight states in the entire Union in which this method of dealing with mental illness still survives. Elsewhere the question of state *vs.* county care has been answered—in some of them a generation ago—by the establishment of full state care.

Does Pennsylvania find any tendency on the part of her neighbors—Virginia, Maryland, Ohio, New York—to return to the old method? New York has had complete state care for over twenty years. Mr. Homer Folks, who in the beginning was not an enthusiast in urging the change but who has been in a position to study critically the growth and development of the great state system of New York, but spoke the minds of all students of the problem when he said, reviewing the twenty years of work of the New York state hospitals, "State care of the insane is a big job well done; the state as alienist has made good." Massachusetts has had complete state care since 1904. Most people in that state, if they think about county care at all, wonder how a contest ever could have been made over the matter. Ohio has had state care since 1903. The question of county care is no longer discussed in Ohio. In no state where state care has supplanted county care is there an agitation for a return to the former system. In practically all of the eight states in which county care still obtains widespread dissatisfaction exists and in most of them full-fledged campaigns are under way to bring about state care.

Of course, the question is really, What standard of care will be satisfactory to the people of Pennsylvania? If Pennsylvania still regards only six hundred out of every thousand of its insane as sick persons needing treatment and the other four hundred as public nuisances to be got out of the way as cheaply as possible, and is satisfied when these individuals are crowded together in unsuitable buildings provided with an insufficient number of wards, where unoccupied they must sit about in poorly ventilated corridors with little or no provision for recent cases, for the sick, the tuberculous, the disturbed, the untidy, the convalescent; where there are no physicians skilled in mental diseases to direct treatment; where adequate facilities for laboratory tests and essential examinations are unknown; where no thought is given to after-care or to prevention, then Pennsylvania should adhere to its county asylums. If, on the other hand, Pennsylvania has kept in touch with the modern studies and developments in psychiatry and is ready to acknowledge that none of her insane is "possessed of devils" but *all* are sick persons suffering from disease as surely as though they were suffering from heart disease or lung disease, and desires that these sick persons shall be cared for as sick persons, in order that those who can recover may, and that those who cannot may at least have such care and treatment as it is considered meet to give to other individuals suffering from incurable disease; if Pennsylvania realizes the yearly waste of its rarest resource in the insidious encroachment of mental disease, and desires to preserve, in so far as possible, the mental integrity and usefulness of its citizens; if Pennsylvania is interested in assisting the rest of the world in the combat against degenerative forces, then Pennsylvania has a larger problem with which to deal and it will find that the resources of the state alone are capable of handling it. The proper diagnosis, care, treatment, after-care and prevention of cases of mental disease have outgrown the resources of the county.

The question has been wrongly put in Pennsylvania. The first question should not be, Shall we have county or state care? Rather, What is the minimal standard of care with which we shall be satisfied? When the latter question is answered the former question will answer itself.

SOME MEDICAL FEATURES OF THE NEW IMMIGRATION LAW

WHEN the new immigration law which goes into effect on May first, 1917, was pending in Congress, the bitter contest waged over the literacy test caused all other features of the bill to be overlooked. The adoption of this test constituted a radical change in public policy involving some fundamental economic and sociological questions. These questions have little direct bearing upon health and none of the proponents of the literacy test based their advocacy of the new method of selection upon such grounds. The very important medical features of the new law were advocated by men who differed widely in their views regarding the literacy test. They saw in the exclusion of insane and mentally defective immigrants an opportunity to select those best fitted to become the parents of American children and to prevent additions to the heavy burden of caring for the insane and mentally defective in our own country. They carried their campaign to a successful termination quite independently of the forces arrayed on either side in the contest over the political and economic features of the proposed law—a task which it was not always easy to perform.

As long ago as 1902 the public authorities charged with the care of the insane in New York commenced insistently to draw attention to the large proportion of aliens among patients in the state hospitals. In the immigration law of 1907 the period during which insane aliens could be deported from institutions in this country was increased, largely on account of the representations made to Congress by these authorities. This act did not provide, more specifically, however, for expert psychiatric examination of immigrants at the time of arrival than did the law of 1891. Much interest was aroused when Dr. Spencer L. Dawes, who was appointed by Governor Dix to study the problem of the alien insane in New York, reported that 9,241 of the 31,624 patients in the state hospitals were citizens of other countries than the United States. There are only five states in the entire country in which the entire number of the insane in institutions exceeds the number of aliens found by Dr. Dawes.

Believing it to be the function of the National Committee for Mental Hygiene to aid in securing better laws for the deportation of insane immigrants, facilities for their more humane deportation and for examination upon arrival by expert psychiatrists (both for the protection of the country and for the immigrants themselves), a conference was called in November, 1912, in which representatives from several states participated. This conference agreed to recommend to Congress a number of changes in the immigration law. Among them were provisions making it a finable offense to bring to this country insane or mentally defective immigrants whose condition could have been detected before coming to this country; providing that officers with especial training in the diagnosis of mental disease should be placed at all large ports of entry; providing that such officers should have suitable facilities for the observation and examination of immigrants; increasing the period during which insane and mentally defective aliens could be deported after their arrival, safeguarding more adequately the return to their own countries of those whom it is found necessary to exclude or deport; providing for mental examination at each of the large ports of Europe and placing medical officers of the United States Public Health Service upon ships bringing immigrants to this country. With the exception of the last two suggestions, which were opposed by the representatives of several foreign governments, all of these recommendations have finally been enacted into law. In order to secure this result, five years of effort was required, during which time two immigration bills were passed by Congress and vetoed by the President. The original conference was enlarged by representatives of official bodies having to deal with the insane in a number of different states. Its members met in Washington several times and it was represented by Dr. Lewellys F. Barker at the hearing given by President Taft in 1913 and by Dr. Stewart Paton at that given by President Wilson in 1915. The most difficult task of those interested only in the medical features of the immigration law proved to be that of escaping entanglement in the contest over the literacy test. In every publication issued by the conference and at every public hearing it was made very clear that this issue had nothing at all to do with the changes proposed. This was recognized by both of the Presidents who approved of the medical provisions although they vetoed, on account of the literacy test, the immigration bills presented to them.

The new law will doubtless result in the exclusion of a considerable number of insane and mentally defective immigrants who now must inevitably escape detection. The literacy test itself will probably tend to exclude marked cases of mental defect for it seems unlikely that the feebleminded will put forth the very great effort needed to acquire an education in countries where educational facilities are limited and only the most enterprising can hope to learn to read and write. This is not so likely to be true of those with higher types of mental defect and middle-grade cases are already detected at Ellis Island with a considerable degree of success. The chief advantages of the new law are its clear recognition of the need for psychiatrists in the most difficult work of detecting mental diseases and mental defect in immigrants, the fact that suitable facilities must now be provided for this examination, and the better safequards provided for the welfare of immigrants who are deported after their arrival.

PSYCHIATRY IN WAR

IT IS interesting to compare the contents of the foreign medical periodicals published at the outbreak of the war with those which have appeared during the past year. Every number of the important English, French and German journals issued in the latter part of 1914 was a "preparedness number" for prospective military surgeons. An enormous amount of information was given regarding wounds, camp sanitation and the personal hygiene of the soldier. Actual war, however, developed medical problems which had been entirely unforeseen and so in the later numbers of these same journals we find attention given to tetanus, "trench-foot," "trench-heart" and many other matters not even mentioned in the "preparedness numbers." This is strikingly true in the case of mental and nervous diseases. Scarcely a word of warning was to be found during the early days of the war regarding the prevention or care of mental and nervous diseases among troops and yet as the war progressed these disorders constituted a problem of the first magnitude in the field, in the base hospitals, at home and in camps for prisoners of war.

Those few persons who had read the articles by Captain R. L. Richards of the Medical Corps of the United States Army on mental and nervous disorders in the Russian-Japanese War were not surprised at the situation that developed in the present war in Europe. The first psychiatric military hospital ever established in time of war was that opened by the Russian Army at Harbin, Manchuria. During fifteen months, 1,747 cases passed through this little hospital of fifty beds and it was believed by military observers that the number treated constituted the smaller part of all the mental disorders developing in the Russian troops about Port Arthur. The medical literature of the present war shows that, even during the first days of mobilization, mental disease and mental deficiency presented themselves as formidable problems for which practically every one of the European armies was unprepared to deal. As the war continued, with its unparalleled conditions of stress, the number of insane cases rapidly increased. For obvious reasons statistics are unavailable but accounts of the extensive plans made for dealing with mental disorders among troops returning to England and to Russia show that the numbers must be enormous.

Turning to our own army we find that in peace mental disorders in all their forms are responsible for one-fifth of the total discharges of enlisted men. These figures do not include discharges and retirements for neurasthenia and hysteria. No other disease, not even tuberculosis, approaches mental diseases in importance as a cause of permanent disability. During the mobilization of the regular troops and militia on the Mexican border last summer and fall, mental disorders again led in the causes for discharge.

Only one conclusion can be drawn from such facts as these—that we must recognize the great practical importance of providing in the organization of military medical units in peace and war adequate facilities for treating mental disorders. Such facilities include provision for the observation of suspected cases, special arrangements for transportation from posts in advanced zones to those at military bases and facilities for effective treatment at such bases. Mental disorders as seen among troops in peace show a comparatively high recovery rate while those occurring in war time—mostly of the infective-exhaustive group—show an even larger proportion of recoveries. Recovery in mental diseases depends very greatly upon the promptness and efficiency in which treatment is received. It is not enough, therefore, to provide facilities at base hospitals for simply detaining mental cases until they can be transported to the interior of the country. Provision must be made for the most active and skilful treatment. Such treatment can only be carried out by physicians and nurses skilled in mental disorders.

Mindful of these facts and anxious to serve in time of war, a group of psychiatrists and neurologists in New York City has organized a psychiatric hospital unit of 114 beds which has been tendered—fully equipped, officered and manned—to the United States Army. This unit will doubtless be attached to one of the larger hospitals. If an extensive mobilization of troops takes place several of these units will be provided. The quota of medical officers and ward attendants in such a unit is large enough to make it possible to detach several of them to accompany mental cases being transported between field hospitals and base hospitals and between the base hospitals and the civil hospitals in the interior. The unit of construction used in the United States Army base hospitals is a simple wooden structure twenty feet wide by one hundred feet in length. It has been found possible with some ingenuity to arrange such buildings so that the needs of all types of mental disorders can be met and it is believed that although the proposed psychiatric hospital unit will be crude in many respects and lacking some of the things apparently necessary in similar institutions in civil life, a very high standard of treatment will nevertheless be possible. The advantages to the men suffering from such grave disorders as mental disease of such care need not be emphasized but it is apparent that the advantages to the military units, which will be relieved of cases with which they are unable to deal, will be equally great. As one military officer expressed it: "The insane soldier is not sick enough to be in bed and too troublesome to be around." This is not exactly the psychiatric view of a person suffering from mental diseases but it emphasizes the desirability of providing a unit which can fit into a military hospital and at the same time be a place where the insane soldier is not out of place. With such a unit, the standard of treatment in mental diseases in our army will reach the high level which now determines the care received by the sick and injured.

SUPERVISION OF THE FEEBLEMINDED

IT is not difficult to understand the reason for the present widespread interest in everything that pertains to the feebleminded. The recently understood and newly discovered hereditary nature of a large amount of feeblemindedness and the comparatively modern understanding of the relationship between mental defect and anti-social conduct explain the situation. These two principles have so aroused popular interest that the question arises whether there is not danger of the subject running away with us. Each year for the past half dozen years bills have been presented in the various state legislatures providing that all feebleminded people shall be segregated, and other bills proposing the sterilization of all defectives and delinquents.

The cost, to say nothing of other considerations, of segregation and lifelong support of all defectives is perhaps prohibitive, and within the last few years it has come more and more to be realized that such general segregation is not necessary. Community surveys, after-care work in connection with the special classes in public schools and observations made at other points of contact with the defectives in the community have shown that large numbers of people who are undoubtedly mentally defective are not obnoxious members of society. They have no anti-social characteristics which are apparent and many of them lead beautiful, serene, useful and harmonious lives. Once we admit the existence of a section of the feebleminded population which is so harmless, we must consider modifying any plan which contemplates wholesale and indiscriminate segregation.

The suspicion arises that the feebleminded have been slandered as a class, that some generalizations in regard to them have been too sweeping. It would seem that, if the problem is to be dealt with intelligently, there must be a better general understanding of the subject and a greater knowledge of all the feebleminded in the community. Not only must the records from the penal institutions in which the anti-social feebleminded are collected be studied, but information furnished by the special classes, the mental clinics and the child-helping and child-saving societies must be thoughtfully considered.

The possibility of the unprotected feebleminded person in the community becoming anti-social is not to be treated lightly. That the feebleminded play a large and exceedingly important part in the problem of crime no one can gainsay. On the other hand, the number of feebleminded who become anti-social must form a small proportion of the total feebleminded population.

A first step in solving the problem of the feebleminded in any state would seem to be a complete census of all the feebleminded in the state. This should be followed by a system of registration under the supervision of a competent governmental authority who should thus have official cognizance of all feebleminded persons in the community likely to become public charges or to be troublesome members of society. Such a plan would permit of a form of governmental extra-institutional supervision. One great advantage would be that segregation would be made much more intelligent than it is now. The cost of such supervision need not be prohibitive as the ultimate agents of such a governmental organization need not be paid servants of the commonwealth. It would be possible to utilize the thousands of men and women of leisure, with altruistic inclinations and impulses, who would be glad to serve in their community as the local representatives of a state bureau of that sort.

Such a plan would make it possible to mobilize in any community eugenic workers, psychologists and clinicians who would make diagnoses and who would be able to make careful prognoses and to recommend the segregation of those individuals who come from stock where hereditary taint is clearly established, those who manifest anti-social tendencies and those who require a period of training before being permitted to undergo the "test of liberty."

Present methods frequently lead to the segregation of feebleminded persons needing segregation least. If, as is possible, the relatively small percentage of defectives in institutions can be made to represent a very large percentage of those who are likely to transmit their defect by heredity, such a plan would be a measure of enormous economic value.

Recent surveys of inmates discharged from institutions for the feebleminded have shown that the majority of male patients have lived without parenthood or criminalistic behavior of any sort, and that a much larger proportion than has been believed of the female defectives, who were protected during their childhood and adolescence and kept from criminalistic exposure and temptation, acquired habits of inhibition which held safely over into middle life. It is a very fortunate thing that it is just as difficult for the feebleminded person to unlearn as it is to learn, and that when once he has acquired habits of self-control he dislikes very much to break away from these inhibitions. Dr. Fernald's story of Jim is to the point. When the field-worker inquired how the boy was doing, the employer replied, "Why, Jim is a good driver. He takes good care of his horses and he is a splendid fellow. The only trouble with Jim is that he will go to bed at seven-thirty every night."

The plan briefly suggested is that of census, registration, extra-institutional supervision, segregation of those who need the institution, and the retention in the community, with the help and assistance of an expert body, of those who can live safely and harmlessly, supported by their own labor rather than at public expense.

TYPES OF DELINQUENT CAREERS

BERNARD GLUECK, M.D.
Director, Psychiatric Clinic, Sing Sing Prison

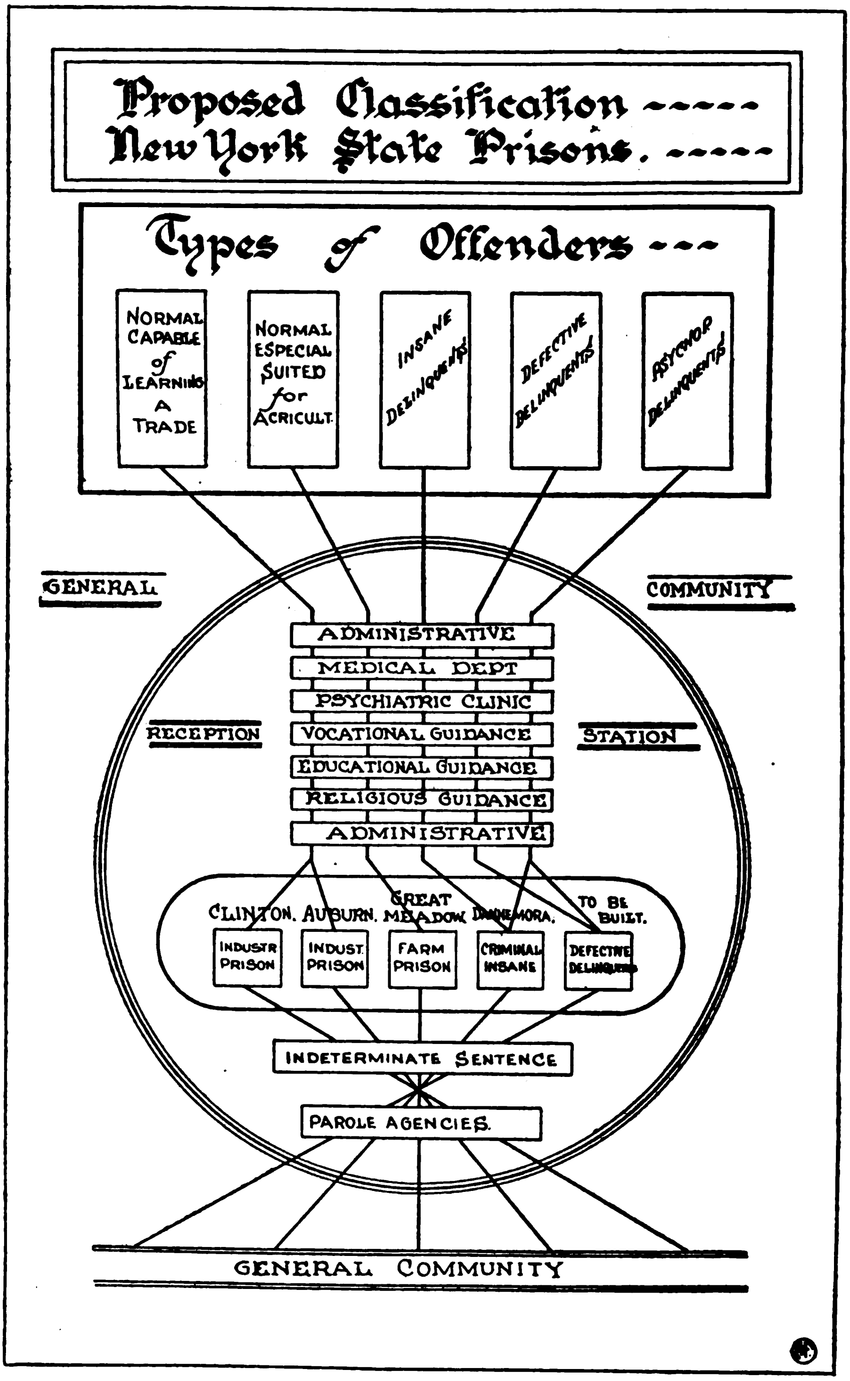
THE far-reaching importance of studying the criminal early in life when the circumstances attending the beginnings of delinquency may be seen in their natural setting has been amply demonstrated by the very valuable work of Healy. Notwithstanding the fact, however, that Healy's experience has been largely with juvenile delinquents, he fully recognizes the necessity of studying the adult criminal. Such a study might aid considerably in estimating the relative importance of early signs of maladjustment and is bound to be helpful in suggesting methods of procedure in the administration of the problem of juvenile delinquency. Furthermore, if the prison is to succeed in turning back into the community better citizens than it receives, its reformative measures must be directed more toward the individual and it cannot do this adequately without a thorough understanding of the physical and mental condition of each prisoner. This need is being more and more recognized by prison officials and in the state of New York definite steps have already been taken to put such a procedure into actual practice.

In place of the present Sing Sing Prison there is to be built an institution which is to serve for the reception and classification of all prisoners of the state of New York and opportunity is to be provided for the application of such scientific methods of procedure as may aid in administering the state's penal problem.

As shown by the accompanying chart (Chart I), the reception prison is to be the connecting link between the prison system of the state and the general community. Each prisoner is to be detained there for as long a period as may be necessary to determine definitely his physical and mental condition and to decide what treatment, occupational or otherwise, will be most efficacious.

As far as we have learned from our experiences with the adult delinquent, the population of the average prison can be divided roughtly into five classes:

1. The normal prisoner who is capable of learning a trade. This group embraces the normal young adults who are still in the formative period of life and who could be benefited materially


Proposed Classification -----
New York State Prisons. -----
Types of Offenders ---
NORMAL CAPABLE of LEARNING A TRADE
NORMAL ESPECIAL SUITED for AGRICULT.
INSANE DELINQUENTS
DEFECTIVE DELINQUENTS
PSYCHOP DELINQUENTS
GENERAL
COMMUNITY
ADMINISTRATIVE
MEDICAL DEPT
PSYCHIATRIC CLINIC
VOCATIONAL GUIDANCE
EDUCATIONAL GUIDANCE
RELIGIOUS GUIDANCE
ADMINISTRATIVE
RECEPTION
STATION
CLINTON.
AUBURN.
GREAT MEADOW.
DANNEMORA.
TO BE BUILT.
INDUSTR PRISON
INDUST. PRISON
FARM PRISON
CRIMINAL INSANE
DEFECTIVE DELINQUENTS
INDETERMINATE SENTENCE
PAROLE AGENCIES.
GENERAL COMMUNITY

by being taught a useful trade, should they possess no trade upon admission to prison.

2. The normal prisoner who is more or less advanced in years, whose occupation has been that of an unskilled laborer and who would make himself most useful to the state as well as derive the most benefit to himself by agricultural work.

3. The insane delinquent whose presence in prison should be recognized as early as possible so as to obviate on the one hand the interference with the proper régime of the institution which is bound to take place as result of his presence, and, on the other hand to afford the insane prisoner proper treatment as early as possible when therapeutic measures may have some beneficial effect.

4. The defective delinquent. The presence of these prisoners among the normal population of the prison seriously interferes with the proper discipline of the institution and they should be recognized on admission and segregated elsewhere. The defective delinquent is found in large numbers among recidivists. A certain percentage of them is unteachable and incapable of benefiting much from any form of procedure and will ultimately have to be kept under custodial care more or less permanently. There is some indication that a special institution for this class will be provided in the state of New York.

5. The psychopathic delinquent. Prisoners of this type are the most troublesome element in a penal institution. They are subject to outbreaks of pathological emotionalism and excitement, and cannot be given proper care in the average prison. Some of these individuals would be better cared for in the institution for the defective delinquent, while others require occasional treatment in the hospital for the insane.

The ultimate distribution of the prisoners admitted to the reception prison, after contact with the various agencies enumerated in the chart—administrative, medical, psychiatric, vocational, educational, and religious—will take place in the following manner:

Group I. To the two industrial prisons of the state.

Group II. To the agricultural prison.

Group III. To the Hospital for the Criminal Insane at Dannemora.

Group IV. To an institution to be provided for the defective delinquents.

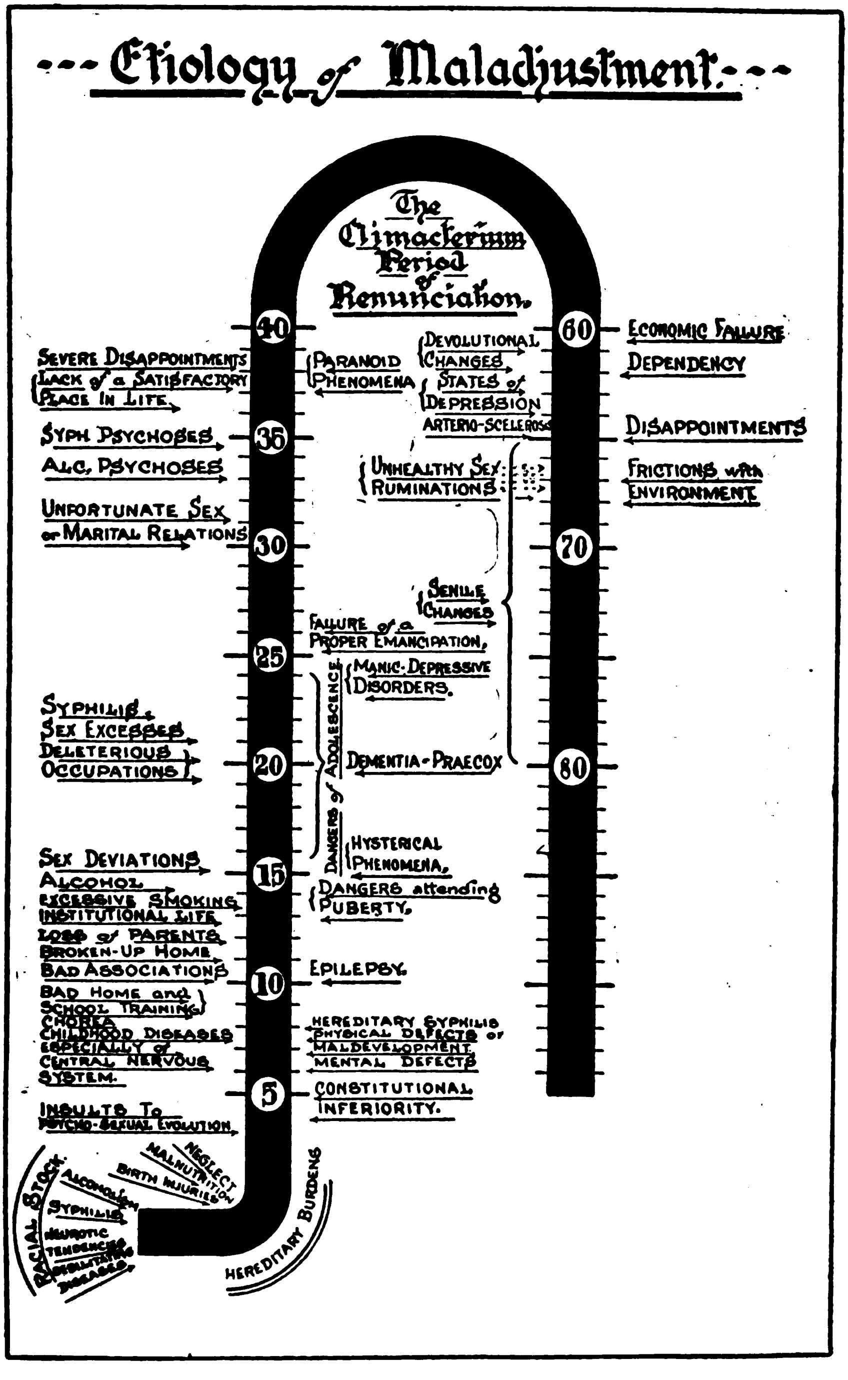
Group V. To either of the latter two institutions.

As all prisoners after serving their sentences in the special institution to which they have been sent by the authorities at the reception prison will be returned to the reception prison before final discharge, it is planned, also, to center the activities of the Parole Board at the reception prison. Although there are certain objections to this procedure the advantages of it are obvious, as at the reception prison will be available the records of the prisoner from the beginning to the end of his period of confinement. A concentration in one place of the agencies which are genuinely interested in helping the discharged prisoner is bound to be of much value.

Naturally, the success of the activities of the reception prison will depend largely upon a proper co-operation between it and the various units of the state prison system. Ultimately, the relationship between these institutions ought to be similar to that existing between the Psychiatric Institute at Ward's Island, N. Y., and the various New York state hospitals for the insane.

In order to illustrate concretely the need of a type of procedure such as has been outlined above, a presentation of some of the findings in fifty consecutive admissions to Sing Sing Prison may not be out of place. The facts which we are about to present are intended merely to furnish a bird's-eye view of the character of the population which is being received at this prison and are not to serve as a basis for strict formulations concerning the subject of criminology. In fact, as soon as an attempt is made to formulate general concepts in this field, one is struck with the extreme lack of dependable information concerning the subject. Take for instance, the question of causation of anti-social behavior. Certain etiologic factors have been emphasized by a few investigators, but, when one attempts to state definitely what is the precise cause of a given delinquent's career, one is very frequently unable to find a satisfactory answer. The truth is, that rarely is it possible to hold a single etiologic factor responsible for a criminal act. On the contrary, in the vast majority of instances, a criminal act must be attributed to a number of antecedent interrelated causative factors, each one contributing its share toward the ultimate result which is expressed in an anti-social act.

In Chart II we have endeavored to present tentatively a number of etiologic factors of maladjustment in their relation to the various epochs in an individual's life. The curve represents an imaginary life cycle divided into age periods, the factors enum-



Etiology of Maladjustment

The Climacterium Period of Renunciation.
40
35
30
25
20
15
10
5
60
70
80
Severe Disappointments
Lack of a Satisfactory Place in Life
Syph Psychoses
Alc. Psychoses
Unfortunate Sex or Marital Relations
Syphilis
Sex Excesses
Deleterious Occupations
Sex Deviations
Alcohol
Excessive Smoking
Institutional Life
Loss of Parents
Broken-Up Home
Bad Associations
Bad Home and School Training
Chorea
Childhood Diseases especially of Central Nervous System.
Insults to Psycho-Sexual Evolution
Racial Stock.
Alcoholism
Syphilis
Neurotic Tendencies
Debilitating Diseases
Birth Injuries
Malnutrition
Neglect
Hereditary Burdens
Paranoid Phenomena
Devolutional Changes
States of Depression
Arterio-Sceleroses
Unhealthy Sex Ruminations
Senile Changes
Failure of a Proper Emancipation,
Dangers of Adolescence
Manic-Depressive Disorders.
Dementia-Praecox
Hysterical Phenomena,
Dangers attending Puberty,
Epilepsy.
Hereditary Syphilis
Physical Defects or Maldevelopment.
Mental Defects
Constitutional Inferiority.
Economic Failure
Dependency
Disappointments
Frictions with Environment

erated outside of the curve constituting the environmental etiology of maladjustment, those inside of the curve the constitutional causes. Naturally, this chart represents only schematically the deleterious possibilities in an individual's career but it is remarkable how frequently one or more of these etiologic possibilities occur in the life histories of adult criminals.

The most significant fact that came to light as a result of a preliminary survey of our records on fifty consecutive admissions is that twenty-eight of the fifty, or fifty-six per cent, suffered from conditions that are capable of affecting conduct very seriously and at least represent special problems, as follows:

	Per cent
Syphilis of the central nervous system......	2 or 4
Mental defect plus syphilis................	2 or 4
Mental defect*...........................	13 or 26
Alcoholic deterioration plus other grave affections..............................	3 or 6
Morphine deterioration..................	1 or 2
Insane..................................	7 or 14

In addition to the above findings, a number of other grave affections of a physical nature, such as organic disease of the heart, pulmonary tuberculosis and syphilis, were found.

RACIAL FACTORS

American, born of American parentage............	18
Irish-American.................................	4
Italian-American...............................	3
American Negro.................................	10
Southern Italian...............................	7
German...	3
Austrian-Pole..................................	1
Russian-Pole...................................	1
Irish..	3

HEREDITARY FACTORS

Excessive alcoholism in one parent......	2	Instances
Alcoholism in brothers and sisters........	5	"
Tuberculosis in one parent.............	2	"
One parent paralytic....................	3	"
Brother paralytic......................	1	"

---

*Only those cases were placed in the group "mental defect" which showed an intelligence of twelve years or under, according to the Yerkes-Bridges Scale.

Mother neurotic	2 Instances
Maternal uncle insane	1 "
Brother insane	1 "

No definite claim is made, of course, concerning the precise relationship between these hereditary factors and the anti-social behavior represented in this study.

Education of parents, as far as could be determined, was as follows:

	Per cent
Parents professionally educated	2 or 4
Parents having a good education	4 or 8
Parents having a fair education	3 or 6
Parents practically illiterate	5 or 10
Parents illiterate	9 or 18
Unknown	27 or 54

AGE ON ADMISSION

16 to 20	7
21 to 25	14
26 to 30	8
31 to 35	10
36 to 40	3
41 to 45	2
46 to 50	3
51 to 55	3

SCHOOL ATTENDANCE

	Per cent
None	4 or 8
Less than 1 year	1 or 2
" " 2 years	2 or 4
" " 3 "	4 or 8
" " 4 "	5 or 10
" " 5 "	2 or 4
" " 6 "	7 or 14
" " 7 "	5 or 10
" " 8 "	6 or 12
" " 9 "	7 or 14
" " 10 "	4 or 8
" " 14 "	3 or 6

The significant fact is to be noted that eight per cent never attended school and that eighty-eight per cent never had more than eight years of school life. Two out of the fifty attended high school. Another significant fact is that twenty-four out of those who attended school commenced at a later age than does the average child. Thirteen commenced at eight or over.

Among those who attended school the following characteristics were manifested during their school career:

Truancy	10	Instances
Excessive truancy	5	"
Seclusiveness	9	"
Backwardness and difficulty in learning	12	"
Normal progress	10	"

A number were expelled from school or transferred directly to reformatory institutions.

ONSET OF DELINQUENT CAREERS

Exact information on this score is difficult to obtain. The nearest approach to it is to note the date of first commitment to a penal or reformatory institution.

Age at first commitment	Number
10 years	1
11 "	2
12 "	1
13 "	3
15 "	1
16 "	1
17 "	8
18 "	6
20 "	2
21 "	2
22 "	3
23 "	1
24 "	3
25 "	3
27 "	3
28 "	1
30 "	1
32 "	2
34 "	1
35 "	1
37 "	1
44 "	1
47 "	1
50 "	1

The most frequent age of first arrest was seventeen, and more than half of the first arrests occurred between seventeen and twenty-five inclusive. In nine instances, the first arrest occurred under sixteen.

RESIDENCE IN REFORMATORY INSTITUTIONS PRIOR TO ADMISSION TO STATE PRISON

Twenty-one out of the fifty, or forty-two per cent, were formerly confined in reformatory institutions, as follows:

Catholic Protectory	3
House of Refuge	2
New York Reformatory	1
Elmira Reformatory	8
Catholic Protectory and House of Refuge	2
Catholic Protectory and Elmira Reformatory	1
Catholic Protectory, House of Refuge and Truant School	1
Catholic Protectory and New York Reformatory	1
House of Refuge and Elmira Reformatory	1
Catholic Protectory, House of Refuge and Elmira Reformatory	1

CRIMES OF FIRST OFFENDERS

Thirteen first offenders, or twenty-six per cent, were charged with the following crimes:

Rape	3
Sodomy	1
Compulsory prostitution	1
Manslaughter	2
Assault	4
Grand larceny	1
Burglary	1

Thus we see that five out of the thirteen first offenders were guilty of sex offenses.

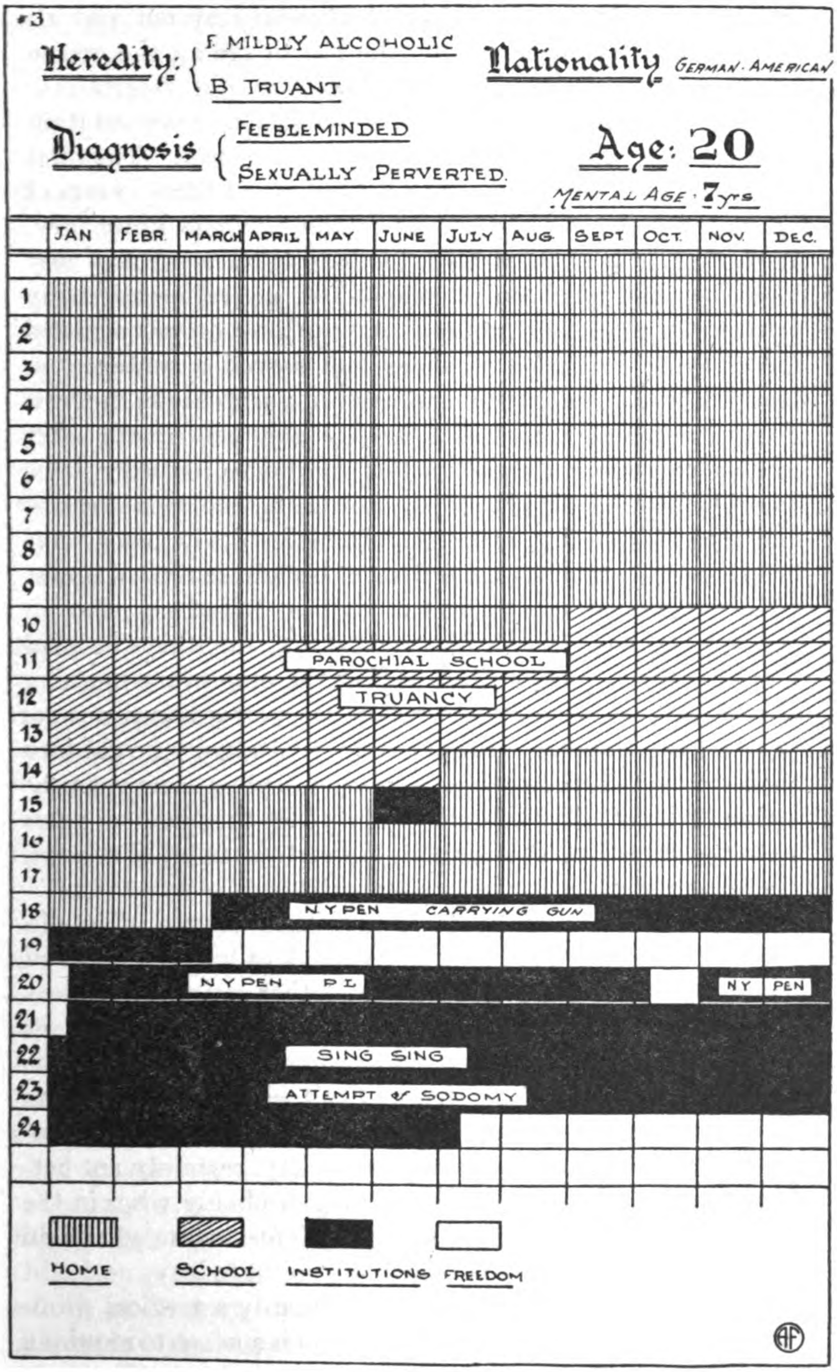
A number of early psychopathic traits came to light which might be mentioned; *e. g.*, nocturnal eneuresis until a late period of childhood—in three instances until eight years of age—screaming during sleep, seclusiveness, quick inflammable temper, impulsiveness, precocious sexuality, sonambulism, stuttering, early habituation to alcohol and other drugs, early intense like for gambling, and inveterate lying. Several of the cases suffered from severe head injuries during childhood; in one instance the head injury was followed by aphasia.

In the course of our study certain types repeatedly came to our attention. The following are the most characteristic:

I. THE DEFECTIVE DELINQUENT

In this group belong those individuals who show various degrees of arrested development, early evidences of incapacity frequently coming to light. Their school careers, in the large majority of instances, terminate before the fifth grade and are usually characterized by inability to learn and some degree of truancy. Industrially, they are markedly inefficient, incapable of holding a position for any length of time and, unless adequately protected, soon come to grief. The forensic importance of this type lies in the fact that they readily become the dupes of the more intelligent criminals, are easily lead into the ways of crime, various habituations, and perverse activities. Chart 3 illustrates the career of one such individual, a brief abstract of whose clinical record is as follows:

> A German-American, aged twenty-five years on admission, January 17, 1917.
>
> *Cause of Admission:* The inmate, who has been in conflict with the law on several occasions, was detected, while serving a sentence in the penitentiary, in the performance of an oral homosexual act. He plead guilty to attempted sodomy and received a sentence to the state prison of from 3 years 6 months to 8 years 8 months.
>
> *Present Status:* The inmate is a fully developed and well nourished white male, and, aside from having hypertrophied tonsils and small adenoids, is free from physical disease or defect. Mentally, he is profoundly defective, possessing a degree of intelligence equivalent to that of a normal child seven years of age. In his conversation he is at times irrelevant; intellectual productivity is very limited; he is somewhat depressed emotionally, very contradictory in his statements and rather seclusive and sensitive in make-up. His range of observation is very limited; he possesses very little foresight and is somewhat over-suggestible. He is more or less indifferent to the gravity of his offense and to the length of his sentence.
>
> *Anamnesis:* The father, a bartender by occupation, drinks moderately. A brother was once confined in a truant school. As far as can be ascertained, the birth and early life of the



#3

Heredity: F. MILDLY ALCOHOLIC; B TRUANT

Nationality GERMAN-AMERICAN

Diagnosis FEEBLEMINDED; SEXUALLY PERVERTED.

Age: 20

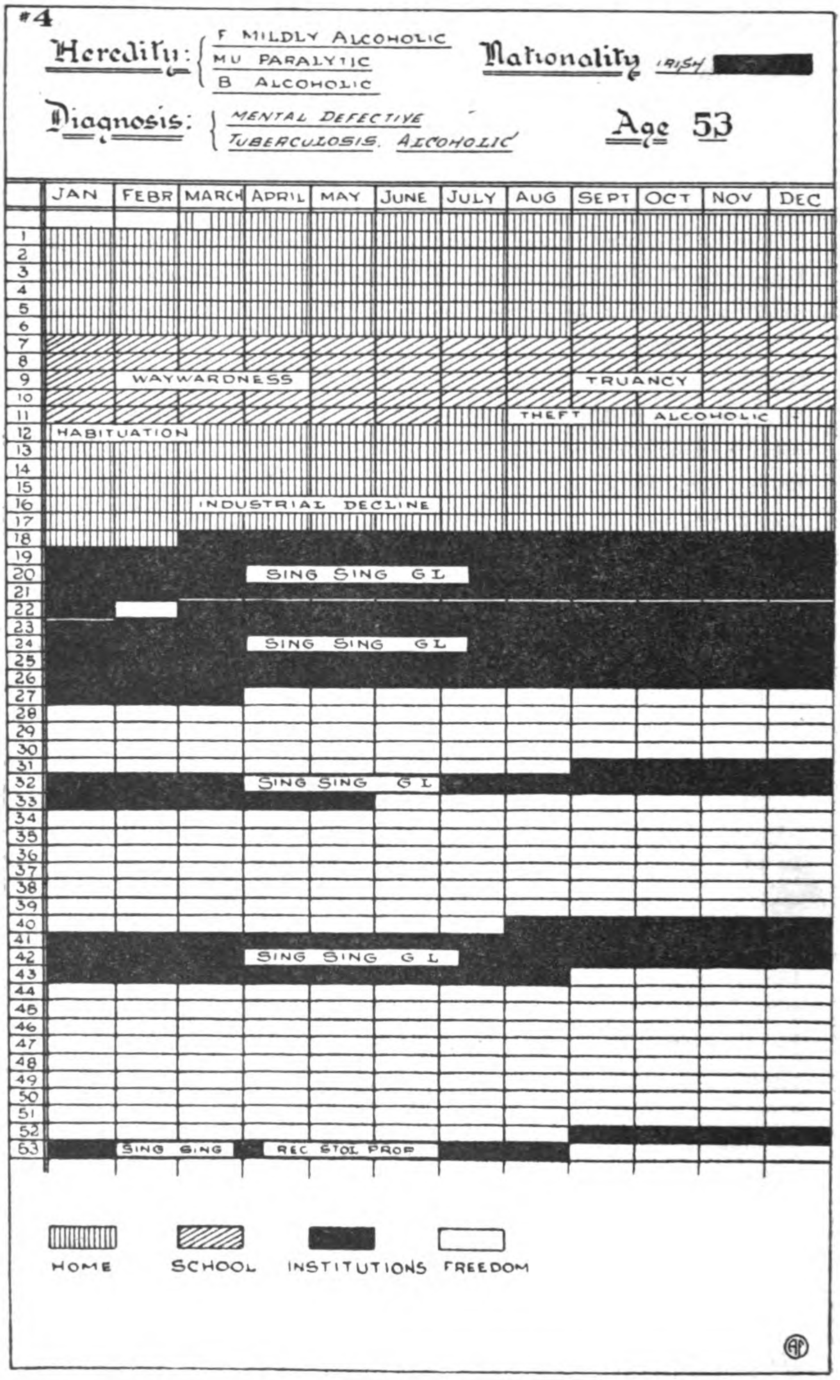
MENTAL AGE · 7 yrs

inmate were uneventful and home conditions were fairly satisfactory. He entered parochial school at ten and attended until fourteen, passing the fourth grade; the reason for his delay in commencing school was not ascertained. He was inclined to play truant when occasion presented itself but, on the whole, attended pretty regularly. The first arrest, for truancy, occurred in 1912 at about fifteen years of age when he served one month in the Catholic Protectory. Beginning to work at sixteen, his industrial career was very inefficient and has been interrupted on several occasions by sojourns in penal institutions. A year later he was arrested for carrying concealed weapons and served a sentence on Hart's Island. In 1916 he again served a sentence in the New York Penitentiary for petit larceny and one month after coming out was sentenced to the workhouse for sixty days, where he was detected in the homosexual act mentioned above and given his present sentence. In his habits he has always been moderate and has spent most of his leisure time at home. About two years ago he met a man on Broadway who induced him to perform a homosexual act, for which he paid him $2. Subsequent to this he met the man every morning at a certain appointed place, where the performance was repeated for a monetary consideration. Gradually he got into the habit of performing these acts when there was no compensation involved. The details of his life for the past two years or so indicate that he is sexually perverted; in all likelihood, permanently so.

Remarks: This man of 25 years with a degree of intelligence of a child of about seven has back of him a number of delinquent acts, some of which are rather serious in nature. His tendency to prostitute himself in connection with his sex activities constitutes a particularly grave menace. Up to the present time these acts have been dealt with exclusively from a legal point of view and at the expiration of his present sentence he will again be released into society, certainly not better fitted to meet its requirements but probably wiser in the ways of crime.. The fact that this boy is feebleminded and, in addition, sexually perverted certainly ought to leave no doubt in anyone's mind that he presents primarily a medical problem and that the nature of his problem is such as to require a more or less permanent segregation in a suitable institution.

A certain number of cases of arrested mental development of lesser degree become early in life addicted to alcohol, which further aggravates their economic inefficiency and dependency. As a result, they repeatedly come into conflict with the law, almost always for crimes of an acquisitive nature. Chart 4 illustrates the life history of one such individual, the abstract of whose career is as follows:

> *Cause of Admission:* A chronic alcoholic who for the past thirty-five years has been in repeated conflict with the law and has spent a large part of this time in penal institutions is again arrested for having received stolen property and sentenced to 1 year and 2 months.
>
> *Anamnesis:* Inmate is the son of illiterate Irish immigrants who brought him to this country at the age of five. A maternal uncle suffered a paralytic stroke and father and one brother were alcoholic. Inmate was born in Ireland in 1863, the third in sequence. He knows nothing concerning his life prior to coming to the United States, but the remainder of his childhood was spent in very unfavorable surroundings in a crowded tenement house. He entered school at six and left at eleven but his school career was characterized by excessive truancy and dislike for study. During childhood he ran away from home on a number of occasions to avoid punishment for disobedience. His parents finally decided to put him to work and for the five years following the termination of his school career he worked more or less steadily as a wall-paper maker in three different establishments and showed some degree of economic ascendency. During this entire period he associated with men considerably older than himself who lead rather loose, anti-social lives. During this period he also drank in immoderation and occasionally stole. He then went into the junk business for himself but this terminated soon after in failure and he abandoned himself to a life of crime and excessive alcoholism. His first arrest occurred in 1875 and since then he has served a number of sentences in various penal institutions. He has always felt that his criminal career was due to bad companionship at an early age, excessive alcoholism and lack of industrial education.
>
> *Present Status:* White male, age fifty-three years, height 5 feet 7¾ inches, weight 143 pounds, very prominent veins in the lower extremities, arterio-sclerosis, tubercular involve-


#4
Heredity:
F Mildly Alcoholic
MU Paralytic
B Alcoholic
Nationality Irish
Diagnosis:
Mental Defective
Tuberculosis. Alcoholic
Age 53
Jan
Febr
March
April
May
June
July
Aug
Sept
Oct
Nov
Dec
1
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4
5
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52
53
Waywardness
Truancy
Theft
Alcoholic
Habituation
Industrial Decline
Sing Sing G L
Sing Sing G L
Sing Sing G L
Sing Sing G L
Sing Sing
Rec Stol Prop
Home
School
Institutions
Freedom
AP

ment of the left apex, negative Wassermann reaction on blood serum. According to the Yerkes-Bridges scale he has an intelligence of eleven and five-tenths years. He is emotionally somewhat depressed but does not seem to be much concerned about his present sentence.

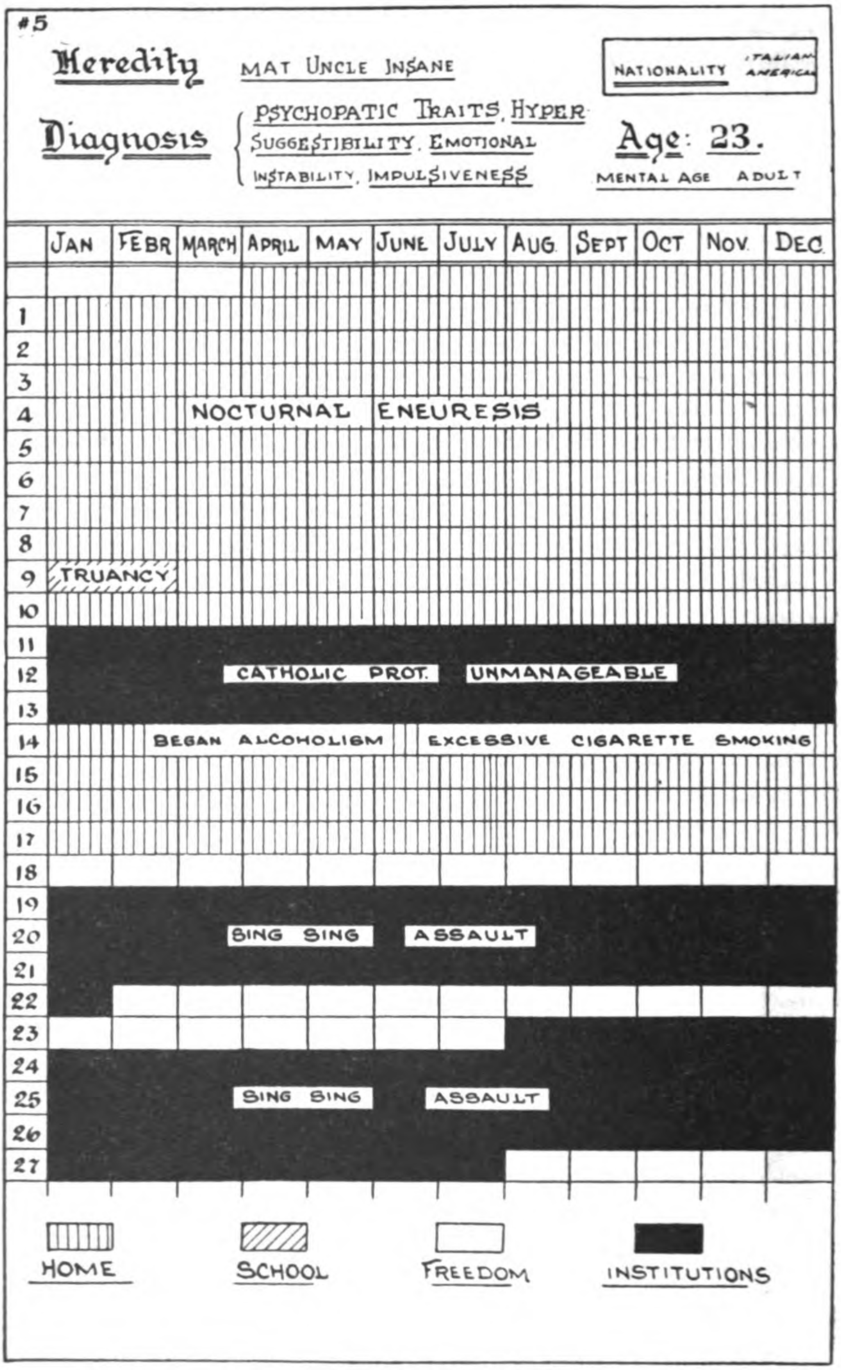
Remarks: A proper handling of this case early in life when the first evidence of waywardness became manifest would, without much doubt, have lead to a different career. Certain it is that his repeated confinements in penal institutions have not served to reconstruct him and it is very doubtful whether his present sentence of one year and two months will have much reformative effect upon him at his present age. Unless he is better supervised upon his release than has been the case in the past, there can be little doubt as to what his future career will be.

II. THE PSYCHOPATHIC DELINQUENT

In this group belong those poorly organized, unstable individuals who from early childhood show various psychopathic traits, such as impulsiveness, a pathological degree of irritability and emotionalism, and frequently a pronounced inability to resist suggestions. They react to frictions with their environment in an impulsive and rather vicious manner, and, although intellectually capable, they are in frequent conflict with the school authorities on account of an inability to adapt themselves to the required régime. The same inability to adjust themselves characterizes their industrial career and, as a result of their highly inflammable make-up and impulsive manner of reaction, they frequently come into conflict with the law for crimes of passion. Chart 5 shows a life history typical of such individuals. An abstract of our records in this case is as follows:

Cause of Admission: The inmate, who had shown an extremely refractory make-up since early childhood and who was sent to a reformatory at the age of eleven for unmanageable conduct, has lead a very anti-social life and has come into frequent conflict with the law on account of impulsive viciousness and resort to physical means in settling his difficulties. At present he is serving his second state prison sentence for assault.

Anamnesis: A maternal uncle, a chronic alcoholic, became insane at thirty-five. Inmate was born in New York City of



#5

Heredity: Mat Uncle Insane

Nationality: Italian American

Diagnosis: Psychopatic Traits, Hyper Suggestibility, Emotional Instability, Impulsiveness

Age: 23.

Mental Age: Adult

southern Italian parentage, being the fifth in sequence. He was bottle-fed and until the age of four was addicted to bed-wetting. Infancy and childhood were spent in fairly comfortable surroundings and in a very religious atmosphere. He entered school at nine (cause of delay not given) and from the first showed such intense dislike for school discipline and restrictions that his school career terminated after two months. At the age of eleven the parents were obliged to send him to the Catholic Protectory because of their inability to manage him. Soon after his release, at fourteen, he began frequenting poolrooms, cabarets, and other public places, where he met many of his former Protectory associates. His industrial career consisted of only two weeks in a tailor shop, following which he led a more or less continuous life of crime and served a number of sentences in the penitentiary for minor offenses. At nineteen, he was sent to state prison for from two and one-half to four and one-half years on a charge of assault. He lost much of his good-conduct allowance on account of pugnacity and impulsive outbreaks of rage. Several months after his release he viciously assaulted a man with whom he had an altercation and later returned and fired a bullet into the back of the man's neck. It is for this assault that he is at present serving a sentence of from four to eight years. He began to indulge in alcohol at a very early age and has lead a rather wild, promiscuous sex life since the age of sixteen. All of his conflicts with the law have been in the nature of assaults and the circumstances attending them seem to indicate a very unstable, impulsive and sensitive nature. Some of his assaults have been carried out in a particularly vicious manner.

Present Status: Well developed and well nourished white male, age twenty-three, height 5 feet 2½ inches, weight 134 pounds, free from physical disorder. Mentally, he does not show any intelligence defect but he does show many psychopathic traits. He is very unstable emotionally, impulsive, lacks foresight, and is extremely sensitive of his personal rights. During the examination he appeared to be on the verge of exploding at any moment, was irritable and easily fatigued by mental exertion.

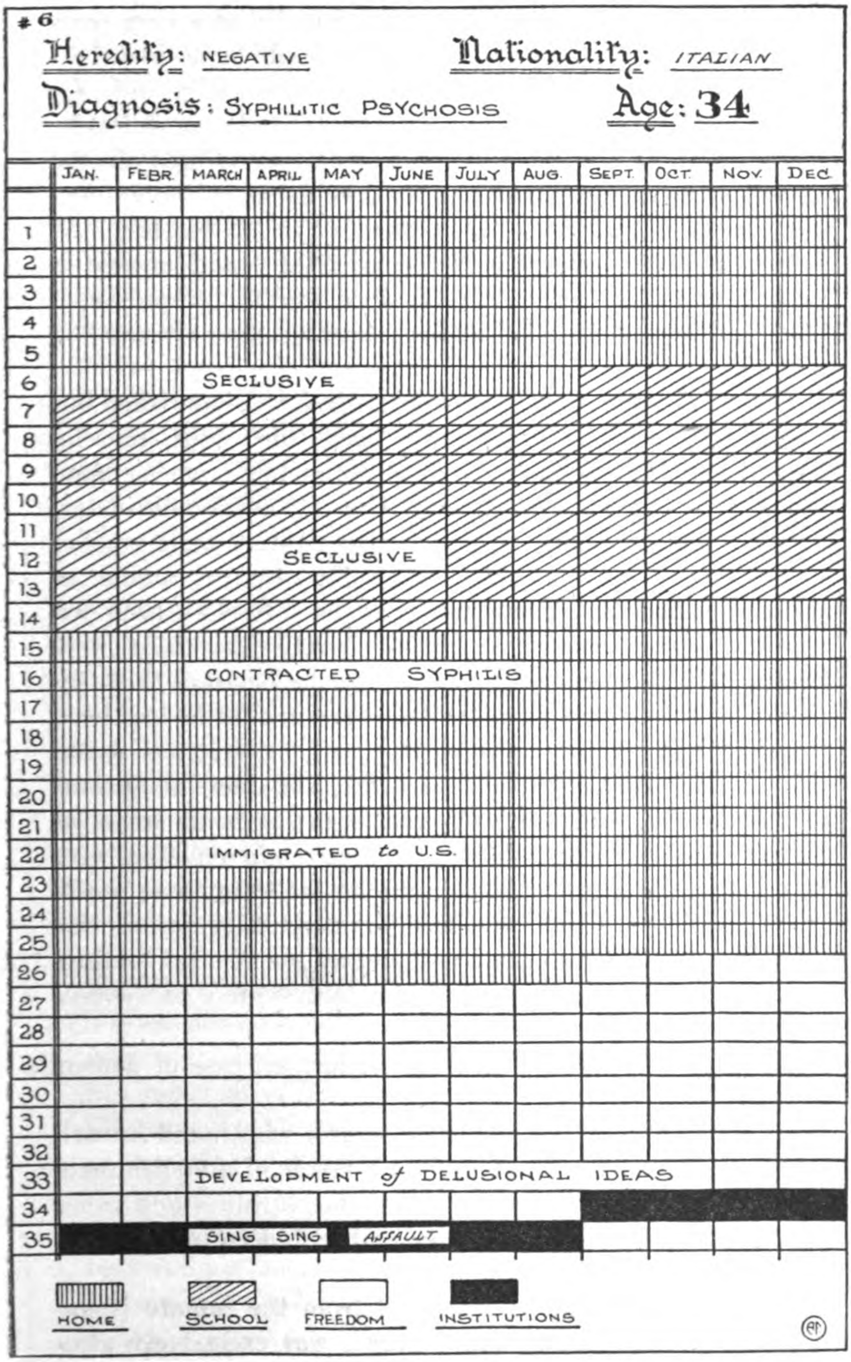
Remarks: It is significant in this case that the crimes for which this boy has been in penal institutions on several occasions constituted the reactions which are distinctly dependent upon his psychopathic make-up. In fact, with the type of individual before us we could almost predict what the nature of his conflicts with the law might be. This class of prisoners constitutes perhaps the most difficult problem in the prison because of their inability to adjust themselves to the required régime and their frequent breaches of discipline. On the other hand, it is very difficult to convince the uninitiated that we are dealing here with a pathological personality, especially so, since they do not show any defect by any of the current methods of psychological examination. Occasionally these individuals show types of reaction which are so pathological in nature as to require treatment in a hospital for the insane. These psychotic conditions are transitory in nature, and recovery of their former state takes place soon after the transfer from the penal institution to the hospital.

III. THE INSANE DELINQUENT

In this group belong those individuals who come into conflict with the law as a result of reacting in a criminal way to their delusional ideas (the actively delinquent insane) or who resort to criminal means of obtaining their livelihood because of their inability to support themselves by any continuous honest work (the passively delinquent insane). In the latter group are found more or less pronouncedly deteriorated insane individuals, most of whom have previously been patients in a hospital for the insane and who were either discharged as socially recovered or to the care of their relatives as unimproved. Chart 6 refers to a case of the first type.

Cause of Admission: A well-behaved, industrially efficient Italian who never before has been in conflict with the law was arrested because he attacked with a razor one of his employees as a result of a belief that this man was trying to drive him out of business and had been persecuting him in other ways. He plead guilty to the charge and was sentenced to from one to two years in the state prison.

Anamnesis: Inmate was born in southern Italy of fairly well-to-do agricultural people and grew up in comfortable surroundings. He entered school in Italy at six and remained until fourteen. He claims that he always enjoyed his school work, never found it hard to learn and was never kept back



#6

Heredity: NEGATIVE

Nationality: ITALIAN

Diagnosis: SYPHILITIC PSYCHOSIS

Age: 34

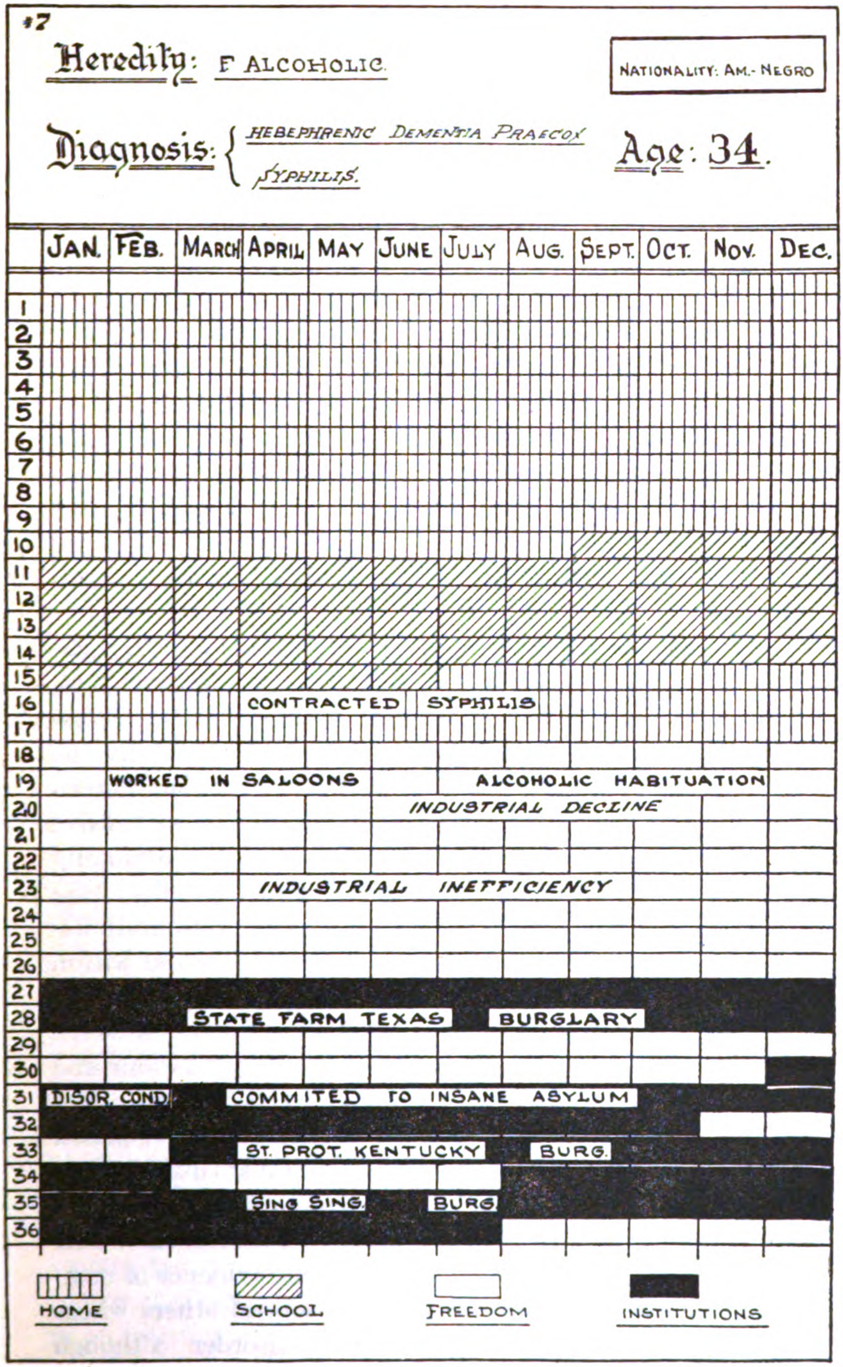
in his classes. During childhood and early adolescence he was always seclusive in his habits. He married at a very early age and conjugal relations were all that could be desired. At sixteen, and prior to his marriage, he contracted syphilis, for which he took treatment for seven months. He says that he is the father of four healthy children and never used alcohol to any appreciable extent. After leaving school he entered the barber's trade and has worked at it all his life. At twenty-two he came to the United States and opened a barber shop of his own. He has since been the proprietor of three different shops, and has been earning on an average $35 a week.

Present Status: A fairly well-developed, well-nourished but exceedingly nervous white male, aged thirty-four, muscles tremulous. Emotionally, he is quite unstable, crying upon slight provocation. Intelligence shows considerable deterioration and according to the Yerkes-Bridges scale reaches ten years and three months. He suffers from a number of somatic delusions. For some time past he has been extremely nervous and has felt as though something were boring into his forehead. At one time he believed that this might be due to something he had eaten or that he had been "doped" with poison. Frequently he feels electrical sensations in his body, especially at night, and these sensations disturb him a great deal. Often at night he hears noises as though someone were talking. Wassermann reaction with blood serum is positive; facial muscles are tremulous; pupils react sluggishy to light, and knee jerks are exaggerated. He refused to submit to a lumbar puncture but clinical findings strongly indicate that he is suffering from syphilis of the central nervous system.

Chart 7 refers to a profoundly deteriorated case of dementia praecox of long standing.

Cause of Admission: An insane negro, who found himself without means of support and as a result of actual hunger broke into a store where he stole some sardines and other articles of food, was apprehended and sentenced to two years in state prison.

Anamnesis: History as obtained from the inmate is unreliable. Father, an illiterate negro, was excessively alcoholic. Inmate was born in Tennessee in 1882, the second in



#7

Heredity: F Alcoholic

Nationality: Am.-Negro

Diagnosis: { Hebephrenic Dementia Praecox
Syphilis.

Age: 34.

sequence. Infancy and childhood appear to have been uneventful. School career was very irregular and terminated after several years in the third grade. Following this there is a history of a very inefficient industrial career, vagrancy, and drunkenness until his first arrest in 1908 for vagrancy. The following year he was arrested for burglary and served two years in the penitentiary. About two years later he found his way to Buffalo, where he was arrested, practically upon his arrival, and sent to the penitentiary for disorderly conduct. From there he was transferred to the Gowanda State Hospital for the Insane. The hospital records show a diagnosis of hebephrenic dementia praecox of five years' duration and state that after a residence of a year and six months, patient was discharged as unimproved into the care of his father in Tennessee. Soon after his arrival home he left for Kentucky, where he was arrested and served one year on a charge of burglary. Upon his release he came to New York and soon after became involved in his present difficulty.

Present Status: Colored male, age thirty-four years, height 5 feet 7½ inches, weight 146 pounds, coarse tremors of face, lips, tongue and fingers, deep reflexes exaggerated. Wassermann reaction with blood serum, 4-plus. Mentally, he shows a marked degree of intellectual and emotional deterioration, is actively hallucinated and expresses many bizarre delusional ideas. It is very likely that this case, originally a dementia praecox, has in addition developed syphilis of the central nervous system. The inmate was so profoundly demented on arrival here that he had to be transferred within a few days to the Dannemora State Hospital.

Remarks: The last two cases are representative of seven that were found among the fifty consecutive admissions and demonstrate a grave defect in our court procedure. Not only is it extremely unjust to send an insane man to prison but the residence of such people in a penal institution causes considerable difficulty to the administration and occasionally leads to very serious injuries to others. The seven cases that were diagnosed insane showed unmistakable evidence of mental disease, and there were in addition several others whose symptoms indicated possible mental disorder although they could not be certified as insane.

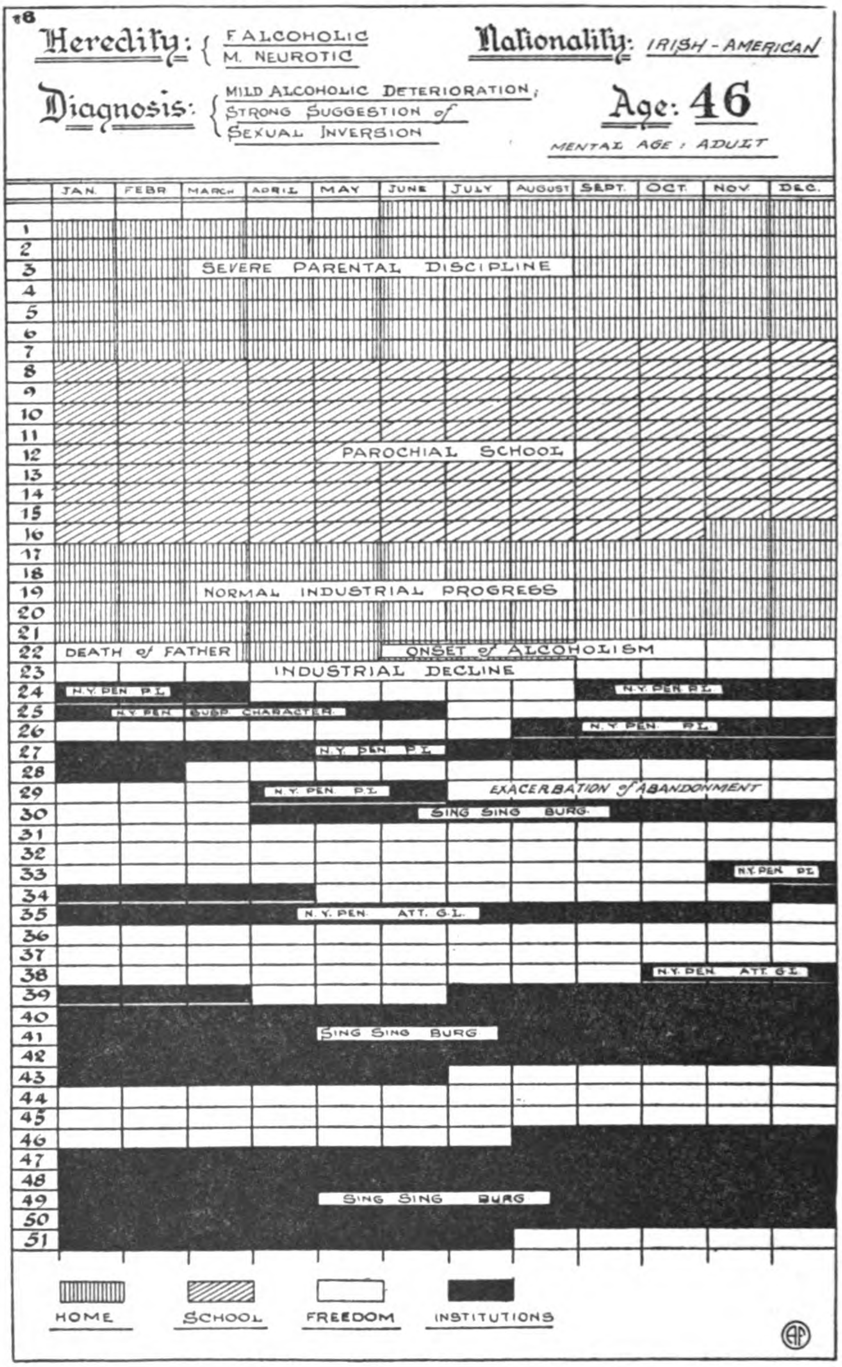
The individuals in the foregoing three groups are definite pathological cases found among the population of the average prison. In addition, there is another group of individuals more or less distinctly characterized and rather frequently found.

IV. LATE ADOLESCENT DEVIATIONS

To this group belong individuals who show a normal progress and a steady industrial ascendency until late in adolescence, when, for some not easily explained reason, a distinct change takes place and the former capable and socially normal individual resorts to excesses of all kinds, becomes profoundly alcoholic, declines in industrial efficiency and frequently comes into conflict with the law as a result of crimes of an acquisitive nature.

Cause of Admission: A chronic alcoholic who had already served about eighteen different sentences, finding himself without funds in the midst of an alcoholic debauch, attempts burglary. He was apprehended before carrying out his intentions, was indicted for burglary in the third degree, and sentenced to five years and six months in state prison.

Anamnesis: He is the son of an alcoholic father and a neurotic mother. He was born in Brooklyn in 1870, the second in sequence, and spent his infancy and childhood in a tenement house. Nothing unusual is to be noted in this period except that the parents were especially strict with him. He attended parochial school between the ages of seven and sixteen, making normal progress. During this period he was not very sociably inclined and did not like to mingle much with other children. His industrial career progressed normally until about twenty-nine years of age, when he finished successfully an apprenticeship as stone cutter. About this time his father died. His subsequent career is characterized by unusually excessive indulgence in alcohol, steady decline in industrial efficiency, and persistent recourse to criminal acts as a means of supplying his wants. His first offence occurred at the age of twenty-four, and up to the present, he has served eighteen different sentences, a large portion of this period in penal institutions. He has spent the greater part of the last twenty-two years in prison. All but one sentence were for crimes of an acquisitive nature, and all were carried out either in an intoxicated state or in close temporal relation to an alcoholic spree. He comments interestingly on this by stating that when under the influence of alcohol a sense of freedom


18
Heredity: F. ALCOHOLIC
M. NEUROTIC
Nationality: IRISH-AMERICAN
Diagnosis: MILD ALCOHOLIC DETERIORATION; STRONG SUGGESTION of SEXUAL INVERSION
Age: 46
MENTAL AGE: ADULT
JAN.
FEBR
MARCH
APRIL
MAY
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SEVERE PARENTAL DISCIPLINE
PAROCHIAL SCHOOL
NORMAL INDUSTRIAL PROGRESS
DEATH of FATHER
ONSET of ALCOHOLISM
INDUSTRIAL DECLINE
N.Y. PEN. P.L.
N.Y. PEN. P.L.
N.Y. PEN. SUSP. CHARACTER.
N.Y. PEN. P.L.
N.Y. PEN. P.L.
N.Y. PEN. P.L.
EXACERBATION of ABANDONMENT
SING SING BURG.
N.Y. PEN. P.L.
N.Y. PEN. ATT. G.L.
N.Y. PEN. ATT. G.L.
SING SING BURG
SING SING BURG
HOME
SCHOOL
FREEDOM
INSTITUTIONS
AP

from social restriction comes over him and he feels free to indulge his acquisitive faculty. He began drinking at nineteen and was moderate in this habit until twenty-four, when, following the death of his father, he became very immoderate, lost in industrial efficiency, was repeatedly discharged on account of drunkenness, and fell a victim to the economic pressure which appears to have been back of all his criminal acts. At the age of twenty-nine there took place a further abandonment and exacerbation of criminal and alcoholic habits, and his first sentence to state prison took place at thirty. He never married, presumably because he felt that he could not support a wife. He states that the trouble with him has been too great congeniality with men who made a practice of drinking. He says that he did not care for the drink so much as for the opportunity to associate with male companions who frequented the saloons.

Present Status: A prematurely senile white male, age forty-six, height 5 feet 7 inches, weight 135 pounds, facial expression apathetic, chest development very poor, hearing impaired, coarse tremor of tongue, slight Rombergism and exaggerated reflexes. Wassermann reaction with blood serum negative. Mentally, he shows some degree of deterioration, especially in the emotional sphere.

Remarks: The difficulty here seems to be largely if not exclusively due to alcoholic indulgence, with the resultant inefficiency, but the point that still remains unexplained is why the individual whose progress is absolutely normal up to the early twenties should so radically change his mode of life and show a progressive decline. There is no suggestion here of a distinct psychosis or arrest of mental development. Similar histories are frequently found among the chronic offenders known as "yeggmen."

In drawing attention to the several types of offenders enumerated above, we do not mean to suggest that there may not be found other types of a more or less well-defined nature among the prison population but we do feel that those we have enumerated represent individuals in whom a more or less distinct relationship between cause and effect can be demonstrated. The fact that in the aggregate the above groups constitute a very large proportion of the prison population, would seem to be sufficient justification for believing that the penal problem is in very large measure a psychiatric one.

EFFICIENCY AND INEFFICIENCY—A PROBLEM IN MEDICINE*

PEARCE BAILEY, M.D.

New York City

AT the risk of saying something that everyone knows, I should like at the outset to hazard a definition of efficiency, as production which secures a full output in the shortest time with the least effort, and which reduces waste to a minimum. In America efficiency has attained its ideal almost exclusively in industry, where it has reached a high degree of perfection. It produces and conserves also. Employers of labor are finding it more and more advantageous to see to it that those who work for them are well, prosperous and happy, and, of course, temperate. One large insurance company maintains a sanitarium with a capacity of two hundred for those of its employes who develop tuberculosis; it operates a free dispensary and lunch room, and provides means for frequent examination of the eyes, teeth, etc. But industrial efficiency considers only its own end. It has no concern with general public welfare, and considers the individual only in so far as he is a working unit. Real efficiency embraces much more, for it is not limited to the perfection of certain specialized groups of carefully selected individuals but concerns the welfare of the whole heterogeneous people. Its aim, and indeed its obligation, is to do for the entire community what industrial organizations do for themselves and their chosen associates. Its task requires a more careful planning than that of industry, for one reason, that while industry picks its own men and can in no way be held responsible for them, a nation is bound to make provision not only for the capable, but just as inevitably for those who cannot fully provide for themselves. This latter necessity, which applies not only to effective collections of workers, but also to those who, left to themselves, cannot be counted on to be useful in production, is the national problem of efficiency; and the foresight with which a nation meets this problem and protects all of its varying classes, and puts opportunity in their way, determines whether that nation is really efficient or not. It is inseparable from practical government and economics, but it is also a problem for medicine, if that term be used to include all the sciences which have to do with man as a working machine, a machine of varying construction and liable to be put out of order. Medicine must come more and more to the front as a helper and guide in meeting this great modern problem.

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* Address delivered at the Annual Meeting of the New York Academy of Medicine, January 4, 1917.

A hint as to how the plan may be worked out can be had from the experience of industry, where one of the medical sciences, psychology, has come forward recently to meet certain industrial difficulties, especially that of the determination of vocational fitness of candidates for employment. In industry the right man for the place is essential, for time lost in getting one man who does not fit is very costly. The expense is felt indirectly in lessened production, but it is also a computable loss, for the wages paid a man who remains at work for only a few weeks or months are practically thrown away. Under old systems the labor turnovers were inevitable and frequent. In one concern 80 per cent of the men hired were discharged within four months. Physical examinations alone not solving the difficulty, employers recently turned to psychologists, who undertake to determine beforehand the existence or absence of vocational fitness. The tests of fitness are based on those devised by Binet and Simon. These tests, with the various modifications of them, determine with remarkable accuracy the mental capacity graded on physical age. Applicants who fail to pass them are found to be unsuitable for occupations requiring more intelligence than that of errand boys, lower domestic servants, elevator operators, and teamsters. Many other tests have been put to use to determine higher grades of mental capacity in persons for whom the Binet tests are too elementary. The most important are those which prove an ability to follow written directions, the association of ideas as shown by the ability to name the opposites of given words, the completion of sentences in which the test words are omitted. As the results of these tests are graded on speed as well as on accuracy of performance, and as the directions to be followed in doing them are rather complicated, they all test the readiness of comprehension of the person examined.

These vocational tests have hardly been used long enough to justify a final opinion as to their full usefulness. But they are meeting the hearty endorsement of employers and their results have attained a reasonably high percentage of agreement with the employer's opinions of the candidates examined.

A manager tells of a woman whom the tests showed to be mentally under age, but who, when she first came into the shops, did very well at a simple operation. At the end of the year, however, she was promoted to another kind of work and did not succeed at it. At last she was put back to the original simple work, where again she did very well. The vocational experiment agreed with the tests.

The mental examination of proposed employes has only recently been added in certain industries to the physical examination. Together, they form a stiff barrier of exclusion. Except in such trades as can make use of substandard men, the very insistence with which industrial organizations demand that their employes shall be sound and capable at the time they are accepted for employment, makes it inevitable that large percentages of those seeking employment are rejected at the outset and are thus thrown back on the community.

Recent developments in many industries, due to the war, have secured labor to large numbers of workmen irrespective of whether they were thoroughly competent or not. These are not permanent conditions. Under labor conditions which will sooner or later become normal, the best organized of the large employers of labor will insist again upon examination, either physical or mental, or both, of all candidates, and will reject a considerable percentage.

Dr. Morehead, chief surgeon of the Interboro Rapid Transit Company, informs me that in the past twenty-nine months, of 82,031 candidates for employment examined physically only, 13,173 or 16½ per cent were rejected, the chief causes being hernia, varicocele, varicose veins, flat feet, heart and lung conditions. Dr. A. S. Knight has kindly given me the following figures in regard to the home office of the Metropolitan Life Insurance Company. All candidates, except for such positions as those of cleaners, printers, laborers, waitresses, kitchen help, elevator men, engineers, firemen, and porters, have to attain 75 per cent in mental tests before being passed on for physical examination. Of 1,443 candidates mentally tested, 604 passed and 839 failed—that is, more than half failed. The number examined physically from November, 1914, to November, 1915, was 1,125. Of these, 841 or 74 per cent were approved medically, 108 were postponed, and 148 were rejected.

What is to become of the large numbers of persons who, as denoted by the above figures, are deemed incompetent for first-class service? They must not only smother their first disappointment, but must make a new adjustment by finding employments which make less exacting demands on physical and mental capacity. These employments not being forthcoming, or not paying well enough for support, many of these individuals become alcoholic, insane, or criminal, and finally must be supported by the state. Industry cannot be blamed for these results, as the exclusion of the partially fit, which it insists upon, would be exacted sooner or later by the people at large. It is less a question of responsibility than of common sense. Common sense dictates that society make some provision beforehand to render this final accounting less drastic. It would be easy to prevent many of these failures. It is a glaring defect of American methods in education and in business that young men are thrust into positions irrespective of what they can do. Industry insures itself against failure, but society knows no such word until it finds itself face to face with it. There can be no national efficiency until it is realized how many people there are who grasp for what they can never hope to attain, who try for what they are certain to fail at, and who would have been far better off had they at the outset correlated their aims with their capacities. There is little difficulty in proving the truth of these assertions. In foreign countries which have a military service, only a little over 50 per cent of men are found fit for first-class service. About 30 per cent of applicants are received in our naval academy and only one applicant out of thirty-five for the marine corps is enlisted. A large percentage of students who enter college leave it in the first year or two, and in one of the best American colleges of technology not more than forty out of every one hundred men entering receive diplomas at the end of the four years. Business manuals show the excessive percentage of persons who fail in this department of life. The absolute collapse of a certain portion of the community appears as the end result of many of these early failures. It would perhaps not be far out of the way to assume that 10 per cent of the adult male population of the state of New York is, for one reason or another and for shorter or longer periods of time, partially or absolutely, economically dependent. The loss in actual money entailed by all these failures must arouse the concern of every economist, but the significance of it is more far-reaching, for with every failure comes a deterioration in character which mortgages future values.

Industrial enterprises have shown us the waste involved in labor turnovers. It is medicine's province to continue to insist on the waste of failure which demoralizes the individual and through him his associates. The workman who loses his job because he has not ability enough for it, the boy who goes to college and has to leave it, the young man backed into some industrial enterprise at which he fails, has not only lost time and money but has also impaired his chances of succeeding at something else.

Even if failure is not absolute, even if a man is not so unsuited to his job that it will have none of him, by keeping on at something at which he can never really succeed, a man never gets in harmony with his work and misses the elation which well-adapted labor brings. He is assailed every day of his life by two sullen enemies of efficiency, enemies not detected by intelligence tests, namely, discouragement and discontent. Realizing that he does not obtain from others the respect necessary for his happiness and protection, and believing that he might have had better things under different conditions, he himself nourishes and passes on to others, a sullen resentment against the world. The more men there are who are out of employment, or who have been thrust by ill-fate into an employment in which they do not attain their full expression, the more widespread waste, discontent and perversity may be expected. Work is more than production —it is the means of self-expression, the great adjuster between the individual and society. The sentiment and unity of feeling of a country is a direct expression of its labor conditions. It would seem, then, that the time has now come to study more intensively the human element in labor, to abandon certain idealistic conceptions and to recognize at the outset that all men do not belong in class A. All branches of human endeavor prove this to be true. Industry has proved it with figures. It is time that governments should recognize that economy, effectiveness, and national peace depend on the success with which they are able to provide suitable employment for men of all grades of capacity; that capacity is not equally distributed, and that the first great task before them is to analyze and assort their material. No one would risk money commercially in erecting a plant and employing labor without knowing beforehand every detail of the material which the venture was proposing to convert into values. Every quality and variation of it would be gone into in the most painstaking way before any program was decided on as to the best way of handling it. Yet the necessity of such an analysis, a primary condition of efficiency, gets scant recognition by our government when it comes to analyzing *human material.* Public opinion is against interference on the vague ground that it is too autocratic and imperial. It is a branch of public health in which economists, politicians and statesmen take little interest. They dismiss proposals in regard to it as impracticable. As a matter of fact, they do not know whether the proposals are practical or not. The real reason for their attitude is that, in spite of the fact that men are not equal and that no one can be free, they too are controlled by the agreeable delusion of equality and liberty. The cherished ideal of America is the right of every individual to dispose of himself as he pleases. The fact that such self-disposal results in substandard men, in inevitable waste and deterioration in inebriety, in alcoholism, in pauperism, crime and insanity, seems to escape observation. Public opinion safeguards its own conscience by making laws which forbid people to be wicked and insane and feebleminded, in much the same way that the old Paris Parliament forbade every one to hold views which contradicted those of Aristotle.

It seems now one of the greatest obligations of medicine to reconstruct public opinion in these matters, to show that the efforts of lawmakers in the way of decreasing the opportunities for temptation—as in prohibition—and in punishing seasoned offenders, do not meet the full issues and can never obtain the maximum good for mankind. It is for medicine to show that efficiency in human affairs, just as surely as in industry, depends on developing and improving the material; and that a primary condition of this is to know what the material is. Medicine is not now called upon to promise any final solution of the difficulty or to guarantee that the whole world will ever be happy. But it promises enough in the way of national effectiveness and economy to be entitled to a fuller opportunity to try out its methods, which are, after all, the same as those made use of in every successful commercial enterprise.

One of the first points to be made clear to the minds of the public is that physical disease offers fewer obstacles to a national efficiency than do defects or disorders of mentality. It is not intended to slight the importance of physical examinations, especially when made in youth for the purpose of controlling disease tendencies at their beginning, nor to minimize the social significance of tuberculosis and especially of syphilis, which is so prone to disable the nervous system. The health of the country has gained enormously by granting arbitrary powers in these matters to boards of health, and the public is firmly convinced of the value of the policy. But the physical diseases are neither so widespread nor so disastrous to character as mental impairments, and yet the public persists in seeing in them the chief medical obstacles to prosperity. Psychological obstacles are not so manifest, and it will be some time before psychologists or alienists are given the confidence and authority accorded to workers in general hygiene. Yet a recognition that mental health is the best assurance of national security and power must come to the country which hopes to be prosperous and happy.

Of the various methods which would be called into use in planning for mental preparedness, applied psychology should perhaps be mentioned first, as it has been more in the public eye than other branches of medicine. It deals with the purely intellectual aspects of personality as opposed to the emotional ones. Its methods are reasonably speedy and furnish surveys of material without prohibitive expense. It has shown in the past few years the high percentage of feeblemindedness in the schools, and has pointed out the necessity of ungraded classes. It shows the wide distribution of mental inefficiency in clerical operatives, as evidenced in the statistics of the Metropolitan Life Insurance Company; and in an extremely important piece of work recently done, it shows in a general way how mental ability is distributed in those early age periods, in which all reconstruction, to be effective, must be begun.

Professor Terman, of Leland Stanford Jr. University, analyzed the general intelligence of 1,000 unselected school children and found that the largest class (60 per cent) was made up of those who had what may be termed "average intelligence," or such as were capable of making the average school progress, with some dropping behind and some occasionally winning promotion. Above the children of this large average class are those of higher intelligence (15 per cent) who are capable of making somewhat more rapid progress than the strictly average child. Still above this is a small class (3 or 4 per cent) of children possessing an intelligence which he designates as "superior." Below all of these, in a group of 15 per cent, are the dullards. The dullards, or dull normals, include the children who would not, according to any of the accepted social standards, be considered feebleminded, but who are, nevertheless, so inferior to the average of intelligence among races of Western European descent as to be unable to make ordinary school progress or to master the other intellectual difficulties of average children. The remaining group of the children examined (6 to 7 per cent) comprises the actually feebleminded, many of whom require institutional treatment and all of whom must be considered unfit for parenthood.

These generalizations of Professor Terman's have paved the way for similar and more extensive researches and, as they stand, are worthy the close study of all interested in social questions. They are not put forth by him as final, but they carry on their face evidence to show in a broad way the distribution of general intelligence in childhood and adolescence, and, as is well known, the general intelligence at this period prophesies with considerable exactitude what the general intelligence will be in adult life. A majority of the children, 60 per cent, is composed of those who do fairly well under the simple requirements and the fixed system of the school. It cannot be expected of them, as a class, to furnish anything original or constructive and their usefulness to themselves and to others when out in the world, as it was in school, will largely depend on the way they are guided and helped. They will, by their numbers, form the backbone of the nation, and the strength they give it will depend entirely on the way they are governed. It is needless to say that ideas of far-reaching wisdom of government cannot be expected from them.

In addition to this large class of workers who are fitted to compete under management, is the class of the feebleminded and defective, all of whom are unfit for parenthood, many of whom are destined for custodial care, and most of whom can succeed at none but the simplest employments. The remainder, made up of individuals of superior intelligence, are those from whom originality and progress and the actual dispositions of the government are to be expected.

Professor Terman's results are not put forth by him as final, nor are they intended to indicate too rigidly the social usefulness of the individuals of the different classes. Social usefulness is not to be determined solely by tests of intelligence. The practical value of intelligence is the ability to compete with one's fellows in the social and industrial world, and such an ability may be gained by other qualities than those strictly intellectual.

Moral traits, personal appearance, influence, and opportunity are all aids to success; and the emotional attitude of the individual towards himself and the world is a potent factor in his ability to get on. Herein lies the chief practical criticism of Professor Terman's results. Some who do not do especially well in the intelligence tests, may, by the possession of other advantages, secure for themselves better places in the world than their actual intelligence entitles them to. But it seems probable that such exceptions as these are more than offset by the cases in which persons, while possessing ordinary or even superior intelligence, are handicapped by such qualities as moodiness, feelings of injustice, ideas of reference, dreamy idealism. All of these are obstacles and sometimes absolute bars to succeess, but none of them are detected by the methods of normal psychology.

The great merit of the psychological tests is that they can be done rapidly and that large numbers of individuals can be examined at reasonable expense. But when it comes to a determination of the personal equation, psychiatry is in a position to furnish a far more accurate estimate. It determines the actual value of qualities; it singles out the defects in character; it estimates the chances of permanency of energy expended in any direction. It lays bare, not only the mind, but the personality. It proceeds by the method of historical inquiry and finds out by what events, by what moral and spiritual forces, the individual character has been welded. It determines the emotional excesses which limit individual usefulness, fixes the relationship between the boundaries of conscious and actual behavior, determines what the person really wants. In these ways it gives a clearer picture of capacities and limitations than can be obtained by psychological methods.

The practical task which psychiatry has before it concerns the determination of vocational fitness, with recommendations for the partially fit; the establishing of a rational attitude toward delinquents, with an early and economic recognition of them; and a reconstruction of some of the principles of education. But its methods take so much time, being possible in large groups only under exceptional circumstances, that its greatest province is in the establishment of principles which, sooner or later, will become incorporated in practical issues. Its use in vocational guidance is still a vexed question which will require greater knowledge before definite conclusions can be reached. Just at present psychiatry is chiefly useful in this field as a deterrent.

As to criminals and delinquents, they are mostly waste products and many of them could be recognized as such in early life. Psychiatry is already prepared with economic suggestions regarding their recognition and disposal. Through private philanthropy, a psychiatric clinic has been established at Sing Sing which proposes to operate for five years. The staff of the clinic, composed of experienced psychiatrists, has no executive responsibilities but devotes all its time to examination of the inmates. The results already obtained from a hundred successive examinations under the supervision of Dr. Bernard Glueck, the director of the clinic, have brought forward many facts extremely important to the rational and economic consideration of crime. Dr. Glueck will himself present his results in due season, but I am permitted to say that he has already demonstrated with considerable certainty that half of the prisoners are delinquents from mental defect, from insanity, from practically hopeless alcoholism, or from physical disease, of which syphilis is the most important. These delinquents must be looked upon as inevitable offenders, under certain conditions. As to whether they are to be considered responsible or not, may be left to the dialecticians. The fact is that, responsible or not, under certain conditions certain people will always behave in a certain way. Handicapped individuals, like half the inmates of Sing Sing, will, under set conditions, commit crimes. It can be postulated just as surely, and with the same disregard of "oughtness," as it can be predicted that on a hot day in summer most pedestrians will be found on the shady side of the street. Most of these handicapped prisoners could have been recognized as potential offenders long before they got into trouble, and much would have been saved to the morals and wealth of the state if they had been so reckoned with in advance. It is by investigations such as this at Sing Sing that psychiatry may be expected to reveal principles which cannot be disregarded if a people is to become really efficient.

Dr. Herman Adler, formerly of the Boston Psychopathic Hospital, has made a study of one hundred psychopathic individuals, not insane, whose residence in the hospital was directly connected with the matter of unemployment.*

He divides this one hundred into groups, the first group containing the paranoid personality—individuals dominated on the one hand by an emotion of activity in altruistic motives; on the other hand by a depression which makes them contentious, surly, suspicious, maintaining that they are abused, ill-used, etc. This group contains forty-three of the one hundred cases. The paranoid averaged twenty-six and six-tenths months to each job, whereas male employes of the Metropolitan Life Insurance Company average nine and two-tenths years of employment.

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* Mental Hygiene, Vol. I, No. 1, p. 16.

The second group contains inadequate personality, which showed in conduct evidences of lack of judgment and intelligence. This group contains thirty-five cases, and averaged twenty-four and seven-tenths months to each job.

The third group contains the emotionally unstable. They can satisfy the ordinary demands of life but are buoyant beyond reason, have many new ideas, but persist in nothing. Another mental phase prominent in this group is that of depression, in which mental activity is slowed, with a lack of initiative and a tendency to be unhappy. These individuals lose their temper easily. There are twenty-two cases in this group, and they averaged fifty months to each job.

The problems brought out in this study are extremely complex and the solution not easy. But the character anomalies observed were doubtless already present in school days and these patients might have found adjustment simpler had the anomalies been recognized and help been given at that time with vocational guidance.

Whoever invented the term "education" had an idea of it of which we have, to a certain extent, lost sight. Etymologically, education means to draw out, to develop something the individual has in him; but our educational methods seem based rather on the idea of putting something in, more or less irrespective of what it is we are putting it into. Our methods neglect the personality of the individual educated, while the plain fact is that education is of use only in so far as the total individual is of a character to make use of it.

The contribution that psychiatry, which studies the variations in the individual, can make to this subject is the demonstration that true education implies a harmonious adjustment between the material and the machine to which it is fed. Education, as psychiatry sees it, is getting an individual into shape to contend with or to fit into surrounding conditions, to give him a grasp of reality. The psychiatrist would seem to be the person to be heard on the subject, as the unstable people who come under his eye are those who fail in this very adjustment.

The real purpose of education is the upbuilding of character, the transmutation year by year of the feral propensities, with which a child comes into the world, into co-operated and directed forces. Without this transmutation of the infantile primitive impulses into an adult, co-ordinated self-control, the individual remains against or outside social order. And psychiatry, from dealing with those who for some reason have lost or have never obtained a grasp on reality and who are out of sorts with society, is in a position to demonstrate the way this has happened and to suggest the means most likely to prevent its occurrence.

Normal mental development, with its increasing control and obedience, its agreement between feelings and actions, its curbing of selfishness with altruism, its dropping of mannerisms and affectations, its abandonment of lying and stealing and collecting, finds its exact counterpart in a certain progressive deterioration of character which has obtained the name of disease.

In dementia praecox, or adolescent insanity, one by one are dropped off the qualities which have been found essential for character formation; one by one, as this disease forges ahead, disappear those qualities which make for success. The patient, instead of being self-restrained or having reasonable explanations for conduct, becomes impulsive again. He has, like the child, senseless outbursts of temper and gives himself over to unprovoked violence. The attitude toward reality changes. Instead of listening to a proposal with a view to understanding it, a negative response comes at once; the patient obstinately resists with his mind and with his muscles suggestions which might result in benefit to him. Mentally he is apt to be apathetic, fearful, losing what feeling of security or indifference to danger education may have developed in him. He shows his fear by running away, by suspicion, by attacking those who surround him. There is incoherence of thought, and such thoughts as he has concern himself—no one else. There is a lack of reasonable harmony between thoughts and attitudes. The latter become bizarre and stereotyped and there is a resumption of the mannerisms, affectations and grimaces which should not persist after early childhood. In the sphere of morality there is either blunting, or a superficial emotional reaction out of proportion to the particular question at issue. There is no longer obedience, or regularity or personal cleanliness. In short, there is clouding in consciousness and a reversion to primitive forms of behavior.

Whatever may some day be found as the pathological cause of dementia praecox, the behavior its victims present is the direct opposite of what it is the real purpose of education to foster. Dementia praecox graphically portrays dispositions and qualities which it should be the object of education to subordinate. It manifests the opposite of what rational training produces. And as all the symptoms of dementia praecox are more or less normal in infancy, but drop away with development, educators should view with concern the persistence of any of them beyond the time of their normal disappearance, and the presence of several of them in one individual makes it an important necessity to institute special efforts to check their further development. Training of character offers the one chance of accomplishing this. The close association between methods of thinking and methods of behavior, the fact that every psychological tendency is revealed by behavior and in turn moulded by it, the fact that jerky muscles mean a jerky mind, and that order of life is essential for mental production, makes conduct fundamental to all education.

In many cases of adolescent insanity it seems almost certain that natural, infantile tendencies, instead of being corrected and directed, had been allowed to run on and that insanity has supervened as a direct outcome of the faulty conditions. Sometimes before the issue is finally decided, the most expert psychiatrist is put to it to distinguish between a case of dementia praecox and a badly brought up child. The love which many parents pride themselves on showing their children, is too often a nagging solicitude and a license to disorder; and the despair of the parents, in the presence of a child whose reason has toppled under their unreasonable management, is intensified by their inability to see how the thing happened. Instead of being taught obedience, and made to obey; instead of being taught self-forgetfulness, and altruism and self-expression; instead of being treated as an individual who must give as well as receive, the child is indulged in his egocentric expressions. He is too often treated in a way the world treats no one and is not prepared to meet life as it is, so that when he finally faces it he finds it a contrast to all he has learned, and goes mad. For this reason, certain habits of adjustment should be fixed in the child, long before he has reached a point where he can be expected to see the reasons for them. Obedience, punctuality, cleanliness, regularity in the movements of the bowels, care of self as opposed to having things done for him, should be inculcated in every child before it goes to school. This will only be possible when parents themselves have learned the necessity of these simple rules of health. Schools should be organized with a view of forcing a compliance with regularity and order and an immediate detection of such children as find difficulty with these things, with a view of determining whether the kind of education provided in the general schools is likely to benefit those who do not respond to discipline. It must soon be recognized that, in addition to subgrade classes for mental defectives, classes will have to be formed for those children who require special character training before they can be educated.

I think I am voicing the opinion of most psychiatrists when I say that special training offers more promise than anything else of reducing the number of the insane. What is needed first is a general dissemination of these views among the public at large and among educators, a greater psychological representation in educational matters, and a closer co-operation between alienists and psychologists and the other groups who are working toward the same end, though on different lines, economists, sociologists and statesmen. What we need most of all is more knowledge, which is to be obtained by scientific workers in specially equipped institutions.

In response to these needs, psychiatry gets scant provision. It is said by those in a position to know that there are not over one hundred trained and experienced psychiatrists in this country, and of these not more than ten or fifteen are wholly engaged in scientific work. We have only three psychopathic hospitals and three institutes for the scientific study of psychiatry. The total budget of these three institutes is less than $60,000 a year. This scant provision is being made toward the solution of a problem the cost of which runs into the hundreds of millions. The government would permit no such neglect of investigation if the problem concerned cotton or wheat or anything which, on the face of it, imperiled so much wealth. It merits extensive appropriations for research to be carried on in psychopathic hospitals, in the reformatories, in the prisons, and in the schools, by men who give their lives to this work. It demands a greater recognition by the medical schools, with full-time professors and opportunities for the most intelligent students to acquire a real knowledge of this branch of medicine, without which no one can be a good physician or surgeon, nor appreciate the explanation of many of the evils of society.

The conclusion of the whole matter seems to lie in this, that the principles adopted in industrial production may be applied with advantage to affairs purely human. More intimate knowledge of the material must be had before settling on any final program, and this can be obtained only by investigation. Money spent in this way may be counted on to bring in handsome returns. Another question is whether, in contributing to human effectiveness, the methods here advocated would contribute to the sum of human happiness. To this may be answered that idleness has long been recognized as the short cut to ruin and its pleasures have never proved enduring. Even under a program that seems at first sight severe, work that taps a man's best energies, regularity and order are the most certain insurers of happiness. And, regarding an ultimate popular approval, perhaps Voltaire was not far wrong when he said, "it is the strictest schoolmasters who are most run after."

STANDARDIZED FIELDS OF INQUIRY FOR CLINICAL STUDIES OF BORDERLINE DEFECTIVES*

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THIS paper is an elaboration and demonstration of a paper read before this society four years ago, entitled "The Diagnosis of the Higher Grades of Mental Defect." The writer then deprecated the popular tendency to consider mental defect, especially in the so-called borderline types, as a definite homogeneous entity and emphasized the fact that the various signs and symptoms may be found in varying degrees and proportions in different cases.

In the former paper it was stated: "From a clinical point of view the borderline case of the 'moron' grade differs from the case of actual imbecility quantitatively rather than qualitatively. Even in cases with very slight mental defect, some of the cardinal symptoms and conditions of imbecility are usually found in lesser degree. There are generally evidences of physical inferiority, certain physical stigmata of degeneracy and defective muscular co-ordination. There is usually a history of delayed dentition, late walking, delayed speech, and relatively long continuance of untidy habits. The patient lacks the expression or appearance of normal mentality. There is frequently a history of mental defect or mental disease in the family. Unmoral and anti-social tendencies are often present. There is a history of school retardation and poor scholastic ability on examination, with special difficulty in arithmetical and practical computations, and lack of general knowledge and information. The patient is unable to apply himself continuously in any one direction, and is willing to risk severe penalties for some very small gain. His actions and conduct indicate a lack of good common sense.

"An accurate and incontestible diagnosis of one of these borderline cases can be made satisfactorily only after a thorough physical examination of the patient, knowledge of the family history, personal history, especially the story of his infancy and early childhood, school history and records, social and moral reactions, sex habits, emotional stability, associates, interests, and the fullest inquiry as to his general information and practical knowledge."

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* Read before the Boston Society of Psychiatry and Neurology, January, 1917.

The paper mentioned suggested general lines of investigation to be followed in each of the above fields, and in any other field likely to throw light on the case, and deprecated the use of routine formal syllabi for examination and record.

Since that paper was written, over 1,500 individuals have been presented for diagnosis as to the presence or absence of mental defect at the out-patient clinics of the Massachusetts School for the Feebleminded, and in several institutional and community surveys under the direction of the writer.

This increase in the number of cases examined soon made it apparent that the varied sorts of information required must be obtained primarily by different members of the staff, and that some properly qualified person should analyze and evaluate the assembled facts concerning each human problem. It likewise became evident that the described method of examination and inquiry should be codified and standardized. The study of the records of many cases showed that the significant signs and symptoms of mental defect in practically every case could be assembled in certain consistent groups. The following ten "Fields of Inquiry" were finally decided upon as furnishing a working basis for individual case study:

1. Physical examination.
2. Family history.
3. Personal and developmental history.
4. School progress.
5. Examination in school work.
6. Practical knowledge and general information.
7. Social history and reactions.
8. Economic efficiency.
9. Moral reactions.
10. Mental examination.

A special syllabus for each field of inquiry has been developed which indicates the general line of investigation to be followed and provides for the recording of the facts obtained.

The various items of information are obtained from many sources. The physician makes the physical examination. The family and personal histories are obtained from the relatives, the family physician, the social worker, the clergyman, and others. The report of school progress is obtained from the teacher or the school records. The pedagogical examination is made on the spot with school books, paper and pencil. Practical knowledge is also tested on the spot by appropriate questions. The social history and reactions, economic efficiency, and moral reactions are evolved from the general history furnished or by direct questioning of the friends or social worker. The intelligence tests are made by the psychologist in the laboratory. The final diagnosis is simplified and clarified by the graphic presentation, on one page of a synopsis, of the significant positive and negative findings in each field of inquiry. This assembling and condensing of the really important data permits a visual evaluation by plus and minus signs of the evidence in each field of inquiry, which is strikingly cumulative and convincing, either for or against a diagnosis of mental defect.

In weighing the evidence in the various fields of inquiry, we attempted at first to use the plus sign of evaluation for the findings which tended to indicate mental defect but this practice led to confusion, although it was in accord with the usual custom in reporting a history, confirming an abnormal condition as positive. Exact mathematical practice, however, tends to refute this usage, and gives the plus and minus signs a meaning entirely opposite. A plus condition, even to a person who knows little of mathematics, means a condition in which there is a superabundance of the thing considered, while minus means want, poverty, a lack, whether we consider brains or income. Psychologically, also, we are justified in using the plus rather than the minus, for the plus sign emphasizes the fact that we are looking at things from the standpoint of the patient rather than from the standpoint of the cold-blooded scientist, who might be supposed to delight in finding evidences of the condition that he is to diagnose.

Each bit of evidence is presented not only in its proper field but in relation to the evidence in other fields of inquiry. Our legal friends have long known the potency of the plan of presenting piece after piece of evidence, each not especially important by itself, but the articulated sum of which builds up a case convincing to the most sceptical judge or jury. Our synopsis of significant findings, with its plus and minus evaluation in each field, is perhaps more nearly the equivalent of the charge of the judge to the jury, summing up the significant pros and cons culled from a great mass of testimony. It is the same principle as that used in psychological experiments, where the summation of stimuli, each too slight to be perceived, nevertheless brings a maximal reaction.

The tenth field of inquiry, or the psychological examination, should not be interpreted as meaning merely the application of some one of the accepted intelligence tests and the use of the resultant mental age as final. We use such an examination to begin with and then, from the findings thus gathered, we have points of departure for further lines of intensive examination of processes which seem abnormal. The final evaluation in this field is a summing up of all such test results with especial emphasis on the behavior of and method of procedure of the child while doing the tests.

Patients are brought to our clinics for diagnosis, prognosis and suggestions for training and education. While the physicians, social workers, teachers, court officials, and others who send these patients evidently have some faith in the opinions that they are to receive, they are not content with a mere statement of the patient's mental age, measured or expressed by any existing system of intelligence tests. Indeed, no single symbol like the Binet mental age or any other arbitrary coefficient or formula can adequately express or represent the entire mental and intellectual status of an individual. Instead of being represented by a single symbol or by the sum total of the varying degrees of ability in certain directions, the mental and intellectual capacity of a given defective could be more correctly expressed by a formula like an algebraic equation, including the additions and deductions representing his various reactions, capacities and deficiencies.

The writer once assembled in a room 252 individuals with a mental age of 8 years. The individuals in this group varied in physical age from twelve to fifty years. Some of them had learned to read, while others had not been able to do so. Some were capable of elementary computations, while others found the simplest concept of number almost beyond their capacity. We had been able to develop some of them to become fairly expert mechanics, but others were able to do only the simplest sort of manual labor. Some were conscientious and relatively trustworthy; others were most untruthful, dishonest and unmoral. In some sex proclivities seemed to be the dominant interest, while in others the sex interest seemed to be entirely normal. This variability shows that a measurable intellectual level is not the only factor in the study of the feebleminded and in the working out of the type of care and training that they need.

These variations would be understood if we should examine the brains of a group of cases with 8-year mentality. We should find that the structural lesions of the central nervous system which cause the mental defect vary as greatly as the behavior characteristics of the group. In certain cases we should find "naked-eye" lesions caused by actual traumatism or as a result of faulty development, and in others the only lesions discoverable would be minute alterations in the ultimate structural elements, visible only with the microscope. The location of these lesions, both gross and microscopical, has also infinite variability, and consequently varying effect upon the mentality of the patient.

We have found that the evaluated synopsis of findings in the different fields of inquiry is very convincing to the friends of the patient, to his legal guardians, and to the courts. It is an easily understood way of enumerating the evidence of his defect.

Since the standardization of case studies was begun we have accumulated complete data on 860 cases, with diagnoses as follows:

Feebleminded	614
Not feebleminded	61
Diagnosis deferred	72
Definite form of mental disease rather than defect	29
Feebleminded, with added mental disease	18
Epileptic, more or less mental abnormality	28
Backward, but not feebleminded	29
Defective by deprivation	2
Hysteria	1
Familial spastic paralysis with progressive mental deterioration	6
	860

The facts obtained from a study of the fields of inquiry in these 860 cases can be most graphically and concisely presented in curves. The curves on the following charts represent the percentage of cases in which the individual field of inquiry under consideration was marked minus. This percentage is in every instance based only upon those cases in which data in that field have been available. In other words, the cases in which data on a field are lacking are discarded in an analysis of that field.

The curves indicate the percentage of minuses found in each of the ten fields. Hence the higher the curve at any one of the ten points—indicated by numbers—the worse in general was the record made by the group under discussion in that field, or the higher the percentage of minus evaluations that field received. Conversely, the lower the curve the better the findings in general.

The group of 614 patients diagnosed as feebleminded includes 315 morons, 235 imbeciles, 38 idiots, and 26 children whose final mental status could not be determined because, although they are definitely feebleminded, they are so young that there is a possibility of mental growth which may take them from the imbecile into the moron group.

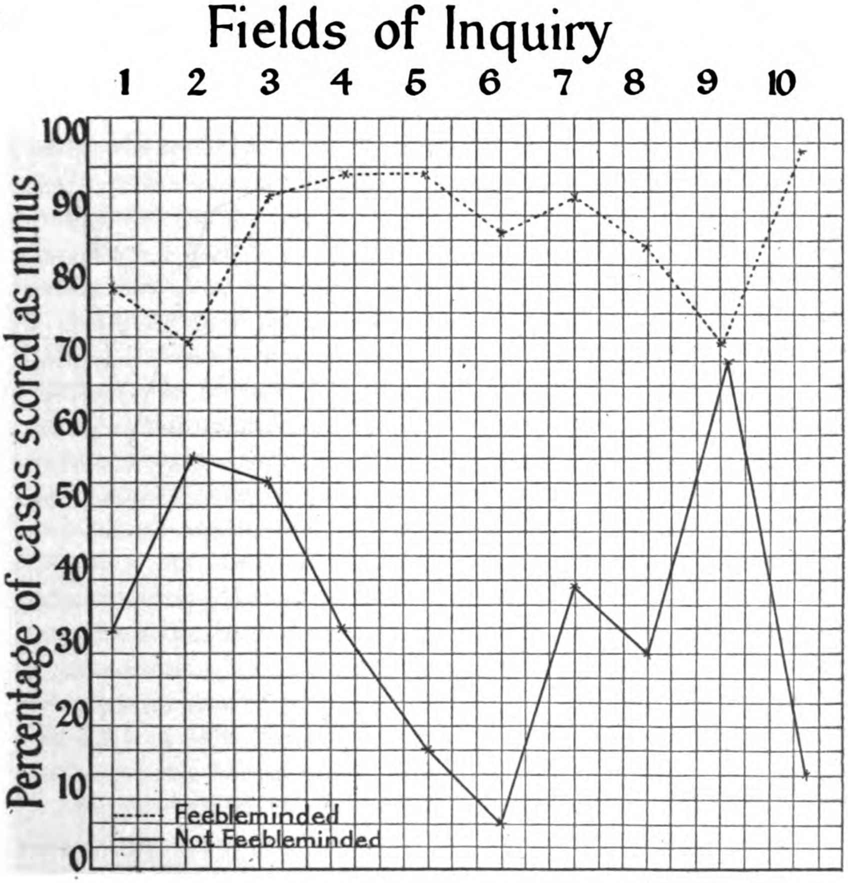
The results of the study of the group diagnosed as feebleminded are shown on Chart I.

The percentage of minuses found in each field of inquiry in our feebleminded group of 614 is shown by the dotted line. Eighty per cent of all cases examined had minus for the physical examination; 72 per cent had bad family history, while the curve rises to 92 per cent in the field of developmental and personal history. Similar high percentages are found in all the other fields except that there is a drop to 72 per cent in the moral reactions. It is gradually becoming evident that while all feebleminded persons are potential criminals in the sense that they have feeble powers of inhibition and are very suggestible, yet a large majority of the feebleminded, if carefully trained and safeguarded during their youth, do not exhibit the immoral and criminalistic tendencies which have generally been considered attributes of the feebleminded. Some of the children in this group were studied before they had become old enough to give evidence of any such traits, while others were too low-grade ever to become social problems.

Our findings in the group diagnosed as "not feebleminded" are indicated by the solid line on Chart I. There is a great difference between the findings in the defective group and in the group presented for examination because of suspected mental defect and diagnosed as "not feebleminded." The height of the curve in the ninth field, that of moral reactions, shows that their bad behavior was the principal reason why the members of this group were brought to the clinic. The height of the curve where are represented findings in fields 1, 2, and 3 shows that this group is handicapped by poor physique, bad family history and resulting poor environment, as well as abnormal developmental history; but the percentage thus handicapped is not so large as in the feebleminded group. In this group the percentage of children who have a history of poor school progress is very small. Most of them are good,

CHART I

COMPARISON OF CASES DIAGNOSED "FEEBLEMINDED" AND "NOT FEEBLEMINDED"



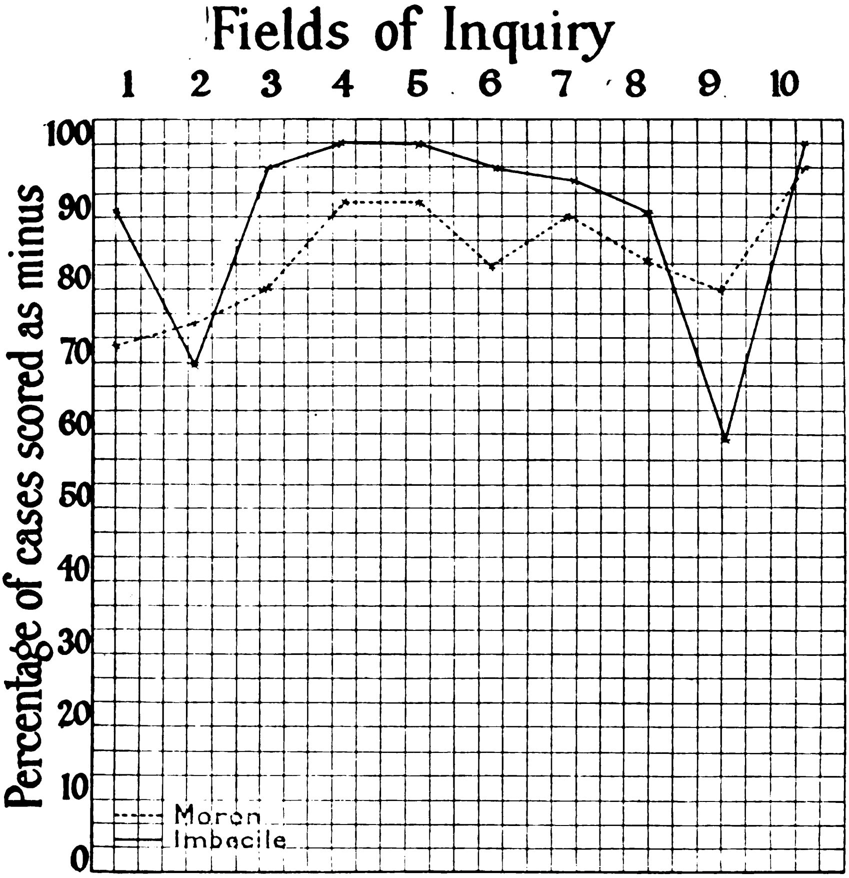
according to school examination, general information and mental examination. It is this ability of the child to progress well in school and kindred fields that makes for the difference in diagnosis.

A comparative study of the findings in the moron and imbecile groups is shown on Chart II.

The imbecile is indicated by the continuous black line. From this we see that as a group he gets about as high a percentage of

CHART II

COMPARISON OF THOSE DIAGNOSED "MORON" AND "IMBECILE"



minuses in each field as he could, with two exceptions. Only 70 per cent of the group have bad family histories. This at first seems surprising, but when we consider that more of our syphilitic, traumatic, and sporadic cases tend towards the lower end of the feebleminded group, and when we remember that with such cases there is often a seemingly normal family tree, the drop in the curve appears logical. The second drop in the curve is at the field of moral reactions. Here the low type of mind, the sheltered life of the recognized lower-grade imbecile, the probable influence of the better homes in those cases where the family history is good, all tend to influence the situation. In the moron, on the contrary, the monotonous regularity of the curve at 72 per cent or more shows the probability of finding corroborative evidence of defect in almost every field.

In this study we examined and diagnosed 315 morons. Of these 315 morons, 124 had not a single field of inquiry that could be counted good and marked with a plus sign. Of these 124, 60 had all the fields minus, 41 had from 1 to 4 fields on which data was not available, 14 had from 1 to 3 fields in which the results were questionable, and 9 cases had each some fields missing and some questionable. However, only 1 case had as few as 5 minuses, 3 had as few as 4 minuses, and the rest had 7 or more fields with bad findings.

Ninety-two of the morons had one field where the findings were good. In 35 of these 92 cases, the plus was in the physical examination. In 18 cases the family history was good; in only 5 was the developmental history good; in only 3 was the history of school progress satisfactory, while only 1 child proved up to grade on a school examination; 9 were passable on general information, 2 were apparently socially normal, 5 were economically doing well, 13 were morally good, but only 1 was up to grade on the mental examination. In 53 of the 92 cases, no fields were lacking or questionable but the other 9 fields of inquiry deserved minus evaluations. Twenty-one of the 92 cases had 1 to 3 fields of inquiry lacking in detail, 11 had 1 or 2 fields questionable, and 7 had 2 to 4 fields debatable or missing. This left all but one case with at least 6 fields minus, and that case had 5 fields minus.

Fifty-seven of the moron group had 2 fields of inquiry plus. In 23 of these cases the physical was one of the examinations counted as good, and in 22 the family history was one of the plus points. In 22 cases the moral reactions were all right. The rest of the pluses were scattered, although in only four instances was the history of school progress good, in only 1 instance was school acquirements good, and in no instance was the mental examination result up to par. Thirty-five of the 57 cases had 8 other fields negative. In 16 instances 1 or 2 fields were missing, and in 6 cases 1 or 2 fields were questionable. Every case had at least 6 points minus.

Twenty-one morons had 3 fields plus. In 14 instances this included physical examination, in 6 the moral reactions, in 7 a good school examination, in 8 good general information. The other pluses were scattered over the various fields, 1 or 2 in each. Thirteen of the 21 cases had all the other points negative, while the other 8 had 1 to 3 fields doubtful or missing; but every case had at least 4 fields of inquiry negative, and all but 2 had 5 fields minus.

Eleven morons had 4 fields plus, but every one of these had the other 6 fields minus, except in 1 instance, where 1 field had no data. The pluses included 6 good physical examinations, 3 good family histories, 3 good developmental histories and 2 cases where school history and school progress were all right. The other points were scattered.

In 10 of the highest grade cases, 5 fields were plus but all the other fields were minus, except in 1 case where 1 field of inquiry remained unfilled. These cases seemed good physically and in family history; they were mostly poor in developmental history—only 2 had progressed normally in school and only 2 were up to grade mentally. The grouping of plus or minus fields in every case is individual, however, and follows no general law.

Unselected Group of Scorings on Fields of Inquiry in Morons

Fields of inquiry	Number of cases						
	225	123	725	719	1,034	1,238	1,215
1. Physical examination	+	–	–	–	–	–	–
2. Family history	–	–	+	?	+	–	–
3. Personal and developmental history	–	–	–	–	–	–	–
4. History of school progress	–	–	–	0	–	–	–
5. Examination in school progress	–	–	–	–	–	–	?
6. Practical knowledge	–	+	–	?	–	0	–
7. Social history	–	–	–	–	–	–	–
8. Economic efficiency	–	–	–	–	–	0	+
9. Moral reactions	–	–	+	–	+	–	+
10. Psychological tests	–	–	–	–	–	–	–

+ = absence of evidence of defect.
– = evidence of defect.
? = doubtful findings.
0 = no data.

SAMPLE SYNOPSIS SHEET FOR CASE DIAGNOSED AS MORON

MASSACHUSETTS SCHOOL FOR THE FEEBLEMINDED

NO. 1106 *Fields of Inquiry—Synopsis of Findings*

NAME, T ——, F ——. Age, 18 7/12. Date, August 17, 1916.

— 1. *Physical Examination.*—Well developed and nourished. Tall. Slouching gait. Myopic, wears glasses. Hearing normal. Bites nails. Patellar reflexes diminished. Cranium brachycephalic. Face asymmetrical. Ears dissimilar, simple formation. Teeth, green stain, lower slightly irregular. Palate moderately high-arched.

— 2. *Family History.*—Second of two by father's second wife. Other normal. Also 1 normal half-sib. Mother insane at 31, in Danvers 15 years, delusions of persecution. Mother's two aunts insane. Father industrious, German, interested in his family.

— 3. *Personal and Developmental History.*—Pregnancy and birth normal. Breast fed. Several convulsions at 1 year. Walked at 1 year and had begun to talk, but stopped talking after convulsions and did not talk again until 7 years. Teeth usual time. No diseases. Laughs and cried easily. Good tempered.

— 4. *History of School Progress.*—Began at 6 (was not talking). Two years in grade I, and promoted about every 2 years until grade VIII (lower). Arithmetic difficult. Reads newspapers. Deportment good.

— 5. *Examination in School Work.*—Spells 8th grade words. Goes through multiplication but cannot do short division. Says 1/100 is greater than 1/50. Says elephant on 3 feet weighs half as much. Tells time, cannot reverse time. Geography poor. Language fair. Reads in fourth reader.

— 6. *Practical Knowledge.*—Poor in general information and in judgment. Fair within range of her own experience.

— 7. *Economic Efficiency.*—Did housework in 6 or 7 different families, earning \$1 or \$2 per week. Stayed only short time in each place because of slowness and inefficiency. Earned \$3 to \$4 a week in electric light factory washing bulbs. Left on account of shortage of work. At home does simple housework under direction.

— 8. *Social History and Reactions.*—Cottage home in Malden. Good district. Has no friends of her own age, prefers children. Easily influenced. Obedient if supervised. Shows no affection for father, but is fond of Sunday-school teacher.

— 9. *Moral Reactions.*—Lies. Met man in factory who persuaded her to live with him for a month. Will do whatever any one tells her.

— 10. *Psychological Tests.*—Binet 9^4 with several points of credit seemingly due to learning from last testing. Very irregular. Stanford-Binet 9 years, 6 months. Very poor on questions involving knowledge of figures. Point Scale 11.2 years. Performance tests fairly good "in spots." Completion board absolutely correct inside one minute. Does all by rapid trial and error.

In this study there are case records of 233 of the imbecile group. On the fields of inquiry only 1 imbecile gets as many as 4 pluses, only 8 get 3, and all the rest have only 1 or 2, or none. Of the 233 cases, 123 have not a single field that could be called good or marked plus. When we consider the pluses we find that 54 of them are indicative of normal family reactions, and 56 indicate a good family history. This leaves only a few scattered cases where some one or two other fields were given a plus, and in no instance was the history of school progress, the school acquirements, or the mental examination plus in its findings.

It must be kept in mind that the minus evaluation of one of the fields of inquiry does not mean exactly the same thing in the moron that it means in the imbecile. A minus in an imbecile always indicates a greater deviation from the norm in the field so evaluated than it does when the case studied is that of a moron. The difference is not qualitative but quantitative.

Unselected Group of Scoring on Fields of Inquiry in Imbeciles

Fields of inquiry	Number of cases						
	1,290	1,288	1,289	1,284	1,027	1,292	983
1. Physical examination	–	–	–	–	–	–	–
2. Family history	–	–	–	–	?	–	?
3. Personal and developmental history	–	–	?	–	–	–	–
4. History of school progress	–	–	–	–	–	–	–
5. Examination in school work	–	–	–	–	–	–	–
6. Practical knowledge	+	0	–	–	–	0	–
7. Social history	–	0	–	–	?	–	–
8. Economic efficiency	0	–	0	–	–	+	–
9. Moral reactions	–	0	–	?	–	0	0
10. Psychological tests	–	–	–	–	–	–	–

+ = absence of evidence of defect.
– = evidence of defect.
? = doubtful findings.
0 = no data.

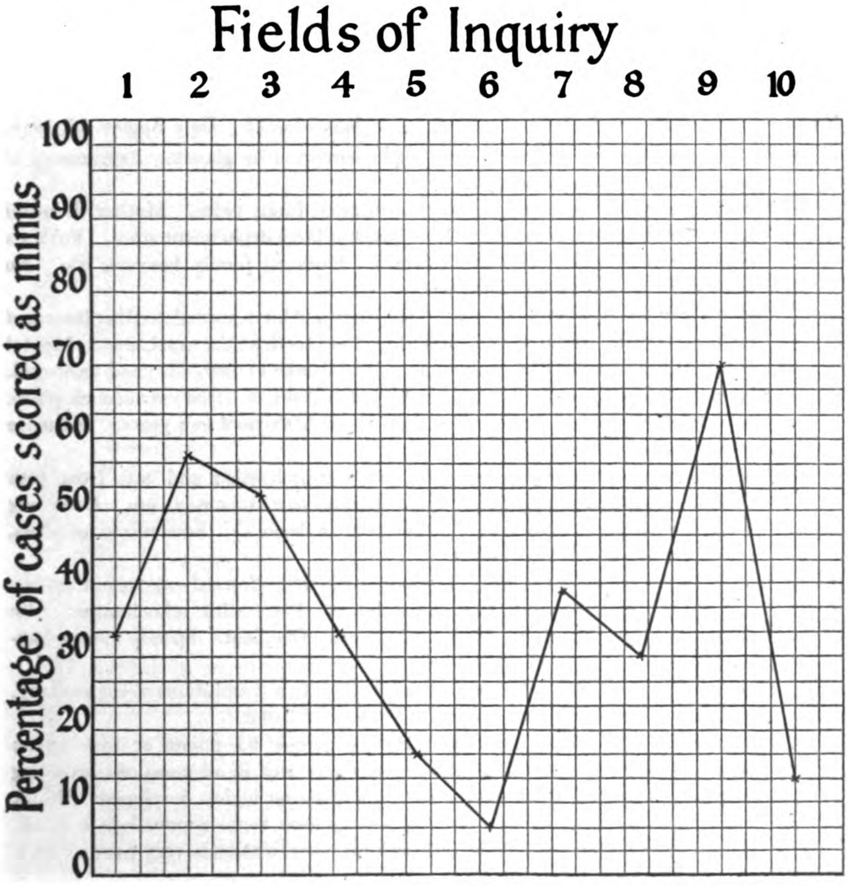
The idiot group of 38 cases really needs only 4 of the fields of inquiry for diagnosis. These are the physical examination, family history, developmental history, and mental examination. Of the 38 idiots diagnosed we found only one where the physical examination could be marked plus, 12 where the family history was good, 4 where it was doubtful and no cases where the developmental history or the mental examination were plus.

The cases diagnosed as not feebleminded give the findings shown on Chart III.

Only 33 per cent of the "not feebleminded" cases presented marked evidence of physical defect or inferiority but 58 per cent of them had a poor or minus family history, and 52 per cent had a developmental history which necessitated a minus evaluation. But, contrasted with this, only 33 per cent were poor in the history of school progress, only 16 per cent were below par in their

CHART III

CASES DIAGNOSED AS NOT FEEBLEMINDED



ability to do school work, and only 7 per cent were minus in general information. In social reactions 39 per cent were minus, 30 per cent were below what might have been expected in economic efficiency, while 70 per cent were minus in moral reactions. Many of them were brought to the clinic merely because of this. Only 13 per cent were below normal on the psychological tests.

Of these 61 cases, 21 had 5 fields of inquiry scored as plus, 15 had 6 fields of inquiry, 13 had 7 fields, 8 had 8 fields, and 1 had every field of inquiry plus. Three children had less than 5 fields of inquiry plus. Of these, one had 4 fields plus, and these four included a good family history, average school progress, good history of right moral reactions, and normal findings by the mental examination. There were also two cases of young children where both general information and mental examination were plus, although other findings were minus in evaluation.

SAMPLE SYNOPSIS SHEET FOR CASE DIAGNOSED AS NOT FEEBLEMINDED

MASSACHUSETTS SCHOOL FOR THE FEEBLEMINDED

NO. 1109 *Fields of Inquiry—Synopsis of Findings*

NAME, C——, L——. Age, 12 5/12. Date August 16, 1916.

− 1. *Physical Examination.*—Under size. Sight corrected by glasses. Asymmetry of helix. Lower incisors irregular.

+ 2. *Family History.*—Only child. Father embezzled funds twice. Mother divorced him. Has been trained nurse. Now buyer at large department store. Father's family intelligent,—clergymen, teachers. Mother's family lawyers, etc. No taint so far as known on either side.

+ 3. *Personal and Developmental History.*—Pregnancy and birth normal; mother later had puerperal fever. Child walked, talked and had teeth at the usual time. Mental peculiarity first noticed at school age. Would take money. Is good tempered.

+ 4. *History of School Progress.*—Began kindergarten at 5 1/2. One year in each grade. Now going into eighth grade. Has been at private school two years. Influence of wealthy boys not good.

+ 5. *Examination in School Work.*—Reads with comprehension and ease from fifth reader. Vocabulary exceedingly rich. Defines parts of speech, etc. Does long division, addition, subtraction, multiplication of decimals. Adds mixed numbers. Works problems of two processes.

+ 6. *Practical Knowledge.*—Excellent. Is exceedingly well informed on current events.

+ 7. *Social History and Reactions.*—Suburban home. Plays with schoolmates. Also enjoys playing with girls. Easily influenced. Obedient. Spends money foolishly.

+ 8. *Economic Efficiency.*—Can help about the house. Is not ambitious to earn money.

− 9. *Moral Reactions.*—Lies, steals money. No sense of honor.

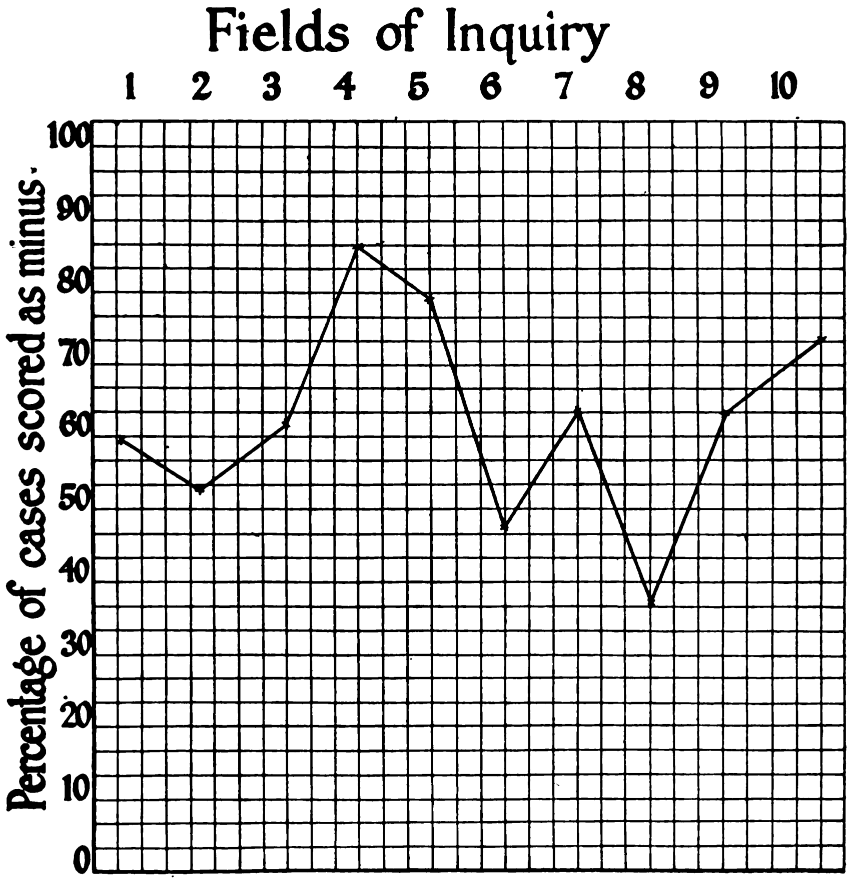
+ 10. *Psychological Tests.*—Goddard-Binet 11^2; Point Scale 94 points or 18+ years; Stanford-Binet, 15 years, 3 months. Does very well in all questions involving reasoning. Fails to resist suggestion. Imagination highly developed. Bright not only along specific lines, but his development seems proportionate in all. Does well on performance tests, although his co-ordination is very poor.

The children diagnosed as backward rather than feebleminded are represented on Chart IV. As a whole, their curve approaches neither the upper edge of the chart, nor the lower edge. It is not conclusively bad or good.

By a physical examination 59 per cent of them are scored minus, 52 per cent have a poor family history, and 61 per cent were minus in developmental history. In the history of school progress, 86 per cent of them were marked minus, and 79 per cent were also minus according to school examination. The height of the curve

CHART IV

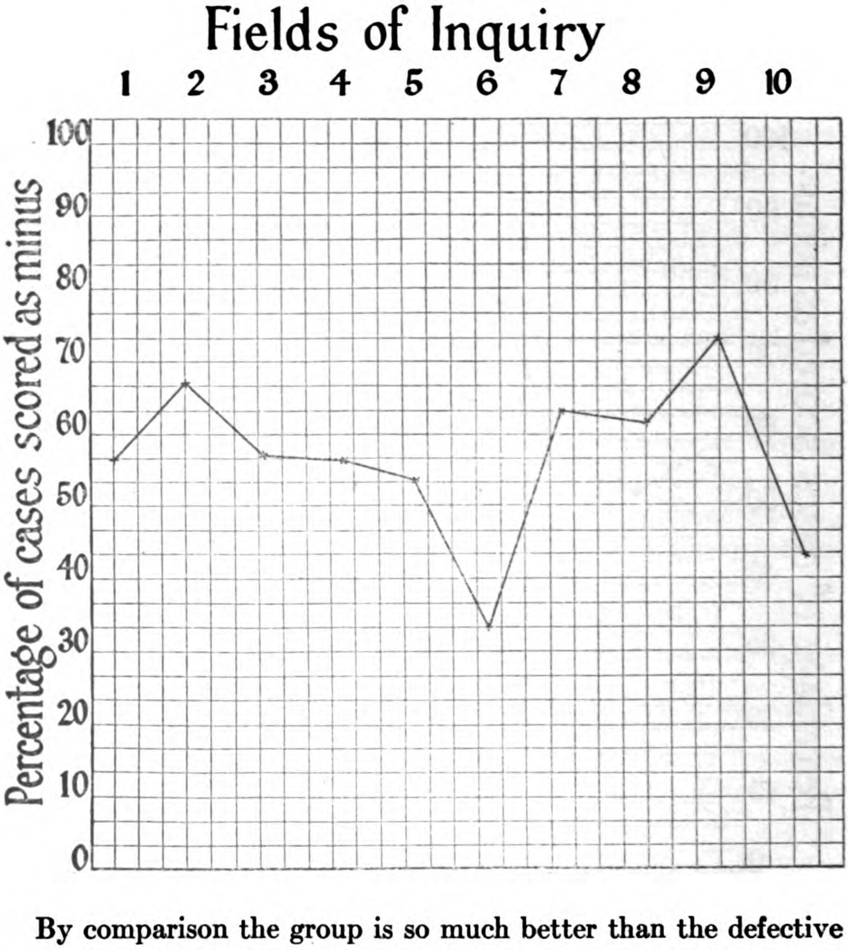
CASES DIAGNOSED AS BACKWARD



in these two fields indicates a common characteristic of this group, *i. e.*, their inability to get along well in school. This has often been what has caused the parents, guardians or teachers to bring them to the clinic. By comparison, they are much better in the field of general information, for only 48 per cent receive a minus evaluation there. Socially and morally, 63 per cent of them are minus, economically only 38 per cent, while mentally 73 per cent are below normal grading.

CHART V

CASES ON WHOM DIAGNOSIS WAS DEFERRED



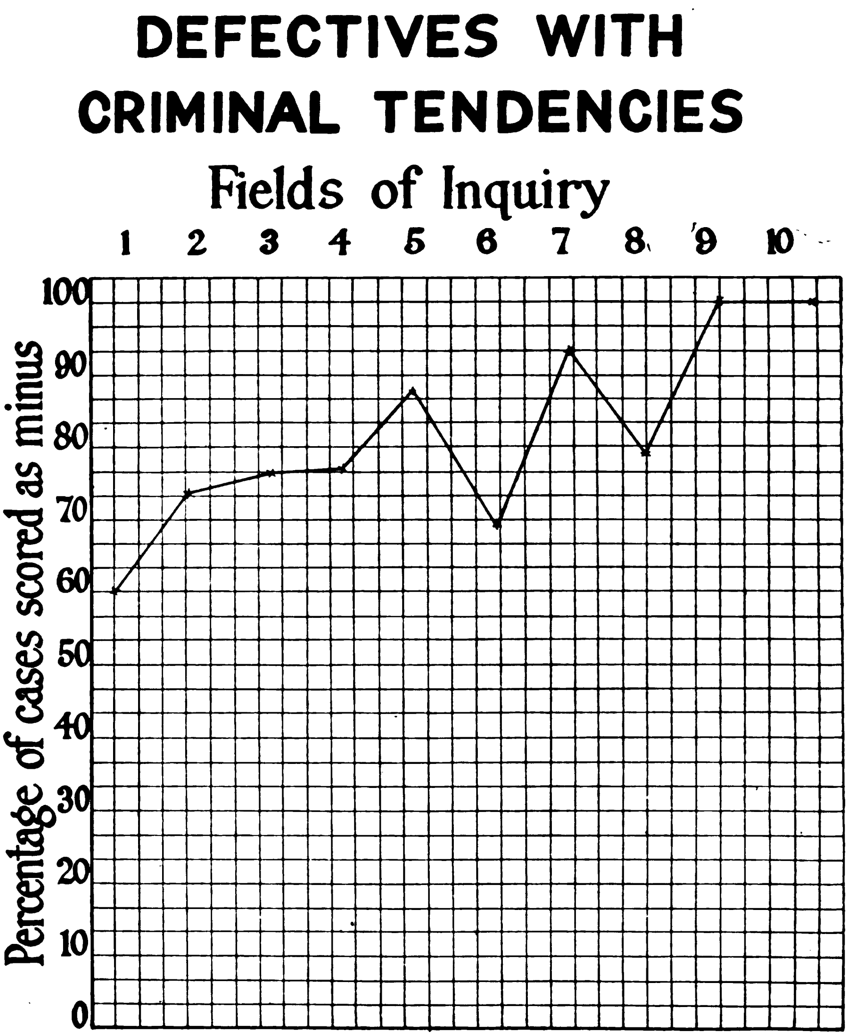
By comparison the group is so much better than the defective group in the fields of general information, economic efficiency, and mental examination, that it seemed fair to make only the diagnosis of mental backwardness rather than that of feeblemindedness, especially when individual handicaps such as language, race differences, etc., were considered.

The situation is somewhat similar in the group on whom diagnosis has been deferred, shown in Chart V. They are not strikingly poor in any one field, except moral reactions. They are minus in physical examination in only 57 per cent of the cases, but 68 per cent of them are handicapped by the wrong kind of family history, and 58 per cent were abnormal in developmental history. Fifty-six per cent could not do well in school and 54 per cent were below par in what they did on the school examination, although only 34 per cent are poor in general information. Sixty-three per cent show something wrong in their social reactions, and 62 per cent are minus in economic efficiency. The reason for their coming to the clinic is frequently their wrong moral reactions, such a history being obtained in 74 per cent of the cases. Only 43 per cent are minus so far as the findings in the mental examination go. We know now that mental development may be almost parallel to chronological age up to a certain point, when retardation suddenly appears, and its very suddenness indicates its permanency. Just such retardation may be appearing in these cases but only continued observation will do justice to the child and verify or disprove such an assumption.

One who compares these two groups may question what basis of differentiation was used. The grouping of cases as backward or as cases of deferred diagnosis was evolved by practice, and was not determined by an a priori classification of terms to be used in the diagnosis of cases in general. We first realized the differential usage of these two terms in surveying our clinic cases for this study. If the cases are studied as individual cases the difference shows more decidedly than in the summaries indicated by the curves, although it can easily be seen that the cases on whom diagnosis was deferred were far better in the fields of school progress, school examination, general information and mental examination than those diagnosed as backward.

Included in the moron group were 42 cases with pronounced criminalistic tendencies. The findings in regard to this group are shown on Chart VI. These criminalistic defectives differ little from the other morons; the physical examination is less apt to give a minus finding, and the heredity is practically the same as with the others. They are less apt than the members of the general group of morons to present evidence of defect in the developmental history. The school performance is superior to that of the morons as a whole and they show up slightly better than the whole group in scholastic examination. They are much superior to the whole group in general information. Their economic efficiency is

CHART VI



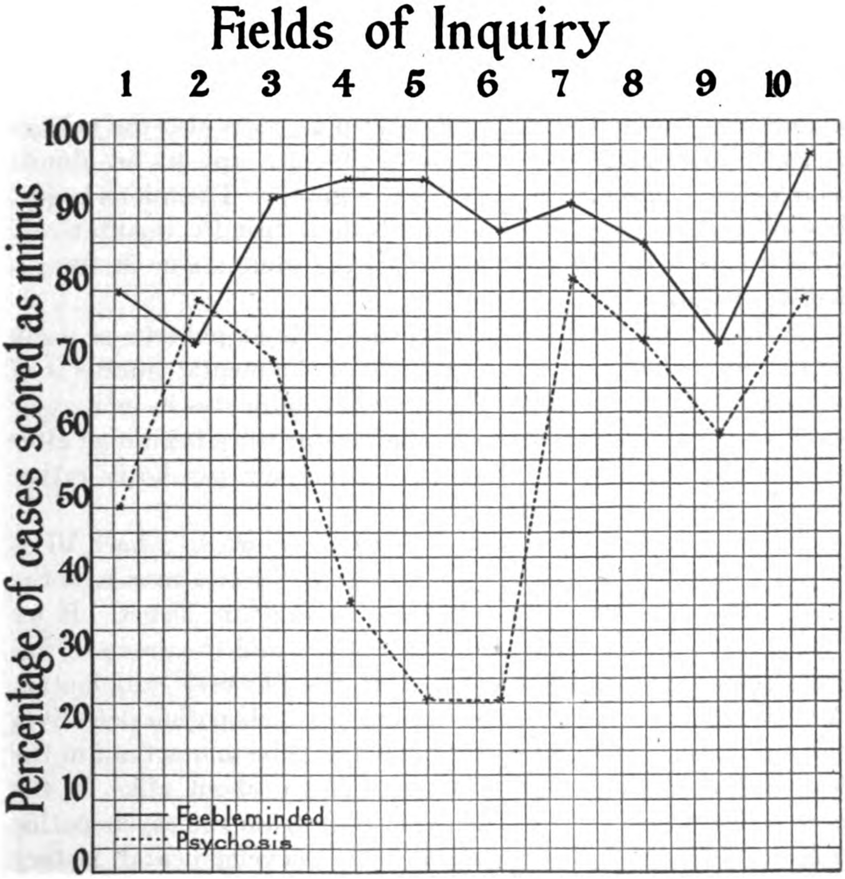
DEFECTIVES WITH CRIMINAL TENDENCIES

in the main that of the general group. Of course they show decided immoral and criminalistic histories in every case, while the general group of morons gives this history in 80 per cent of the cases. In the mental examination evidence of defect was found in every case, but the mental ages have a lesser range and the average mental age is higher than for the other morons.

It might be well to state here that a minus evaluation in the psychological examination does not mean that a child is quanti-

CHART VII

COMPARISON OF FEEBLEMINDED AND PSYCHOTIC CASES



tatively below par and to be called defective when the mental age alone is considered, but the minus is the general expression of the qualitative differences which have been brought out by the use of mental tests and all supplementary psychological tests. For instance, we have no hesitation in diagnosing, as feebleminded, individuals whom the formal mental tests show to be not more than one year retarded, or even who test at age, if there is consistent evidence of mental defect in the other fields of inquiry.

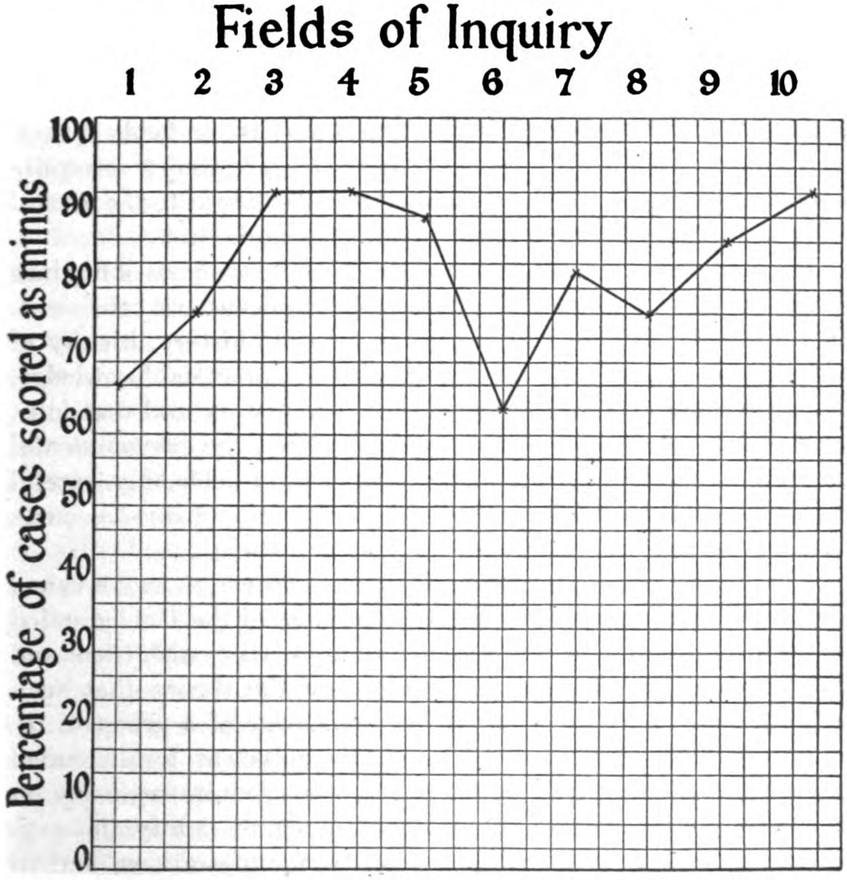
Cases of psychoses probably appear less frequently at our clinic than at some others, but despite the smaller number of cases the differences between this group, as shown on Chart VII, and the feebleminded group is very clearly marked. The physical examination of the psychotic case is less apt to reveal minus attributes. The family history is slightly more apt to be minus, probably due to the greater ease in obtaining a history of insanity in the patient's forebears than in obtaining data evidencing the presence of mental defect. The developmental history is less apt to be abnormal in a psychosis. The school progress and examination in school work are usually plus, as is also the field of general information. The other points are apt to be almost as frequently minus as in the defective group. The minus is due, however, to a type of findings which is usually qualitatively different from the data which brings the same minus in the defective group.

In the mental troubles of boys and girls at puberty or early adolescence, the age at the beginning of the mental trouble is of vast significance. Mental defect always originates in infancy or early childhood, and a case of mental disturbance beginning after early childhood always indicates a beginning psychosis rather than a case of mental defect.

The group of psychopathic defectives, shown in Chart VIII, is interesting because of the way in which it seems to mingle the factors found in both mental disease and mental defect. If we compare it with the group of feebleminded and the group of uncomplicated psychoses, we find that the physical examination is more apt to be minus in the group of psychopathic defectives than in the psychotic group, but less apt to be minus than in the feebleminded group. All three groups are about alike in the percentage which have bad heredity, but again the psychopathic defective group is intermediary. The developmental history has the highest percentage of cases in the psychopathic defective. They are most apt to have a minus history of school progress but the school acquirements are minus in a smaller percentage of cases than in the moron group but in a larger proportion than in the psychotic. They rank also between those diagnosed as morons and those diagnosed as psychotics in the percentage of cases which are minus in general information, social reactions, and economic efficiency; but their moral reactions are bad more frequently than in either of the other groups.

CHART VIII

CASES DIAGNOSED AS PSYCHOPATHIC DEFECTIVES



To summarize the findings on these various groups it may be said that, as a rule, in a definitely feebleminded person, evidence of mental defect will be found in most of the ten fields of inquiry; and even in the so-called borderline cases where the mental defect is slight, as a rule, definite evidence of mental defect will also be found in nearly all of the fields.

The cases analyzed were not studied with the primary object of scientific research, but were seen in the regular work of the out-patient clinic. In some cases, especially those brought from the courts, or from charitable societies, or from institutions, it is not possible to obtain definite information in certain of these fields, including family history, school history, etc. Even in these cases, however, the unanimity of the findings in the fields which we are able to investigate makes it highly probable that the missing facts, when obtained, will corroborate and agree with the data obtained in the fields investigated. In fact, while it is highly desirable to be able to obtain data in each of these ten fields of inquiry, yet it is by no means necessary to do so in order to make a diagnosis. For instance, fields 1, 2, 5 and 10, or fields 1, 3, 4, and 10, or fields 5, 6, and 10, or fields 5, 7, 8, and 9 are quite sufficient to convince the experienced investigator as to the mental defect or otherwise of the patient under examination.

In cases which are not mentally defective the synopsis of findings in the fields of inquiry is usually equally significant and consistent. If a patient has a normal mind, his personal history, history of school progress, examination in school work, practical knowledge, etc., are those of a normal person. Social history and reactions, and moral reactions are constantly modified by environmental influences, and if deficiencies are found in these fields only, careful inquiry should be made as to whether they are not due to causes other than that of inherent lack of mental capacity.

The clinical psychologists are apt to be sceptical as to the value, as a means of diagnosis, of mere knowledge of the feebleminded as a class, and of experience gained in associating with them and in studying them in their daily lives, on the theory that such experience is based upon empirical knowledge of a group of individuals who have already been diagnosed as feebleminded by other workers. Indeed, there is a very definite tendency on the part of the clinical psychologist to regard lightly the psychiatrical, pedagogical and behavioristic manifestations, and to regard laboratory tests as quite sufficient to settle the mental status of presumably feebleminded persons.

Certain recent prison and reformatory surveys have graphically illustrated this tendency. In a certain survey of the population of a reformatory for boys, the examiner found 84 per cent of the inmates to be feebleminded. In an industrial school, 97 per cent of the girls were declared to be feebleminded, and 3 per cent backward; while 76 per cent of the boys were declared to be feebleminded and 21 per cent backward.

Not long ago a girl of 13 was referred to the writer, accompanied by a clinical psychologist. The psychologist strongly objected to having the writer see the case, saying that it was one for psychological diagnosis only. Her findings were that this girl of 13 had a mental age of 8 years; that she was a case of ordinary mental defect. A course of training and education had been laid out and a definite prognosis given. Clinical investigation showed that this girl of 13 had shown no signs of mental defect or disturbance until she was 12 years old, when she became confused, depressed and unable to carry on her school work. She was evidently suffering from an acute psychosis, and was not feebleminded. The diagnosis, prognosis and treatment were not correct. In this case, at least, the laboratory findings did not distinguish between feeblemindedness and dementia praecox. The personal history, the pedagogical history, the time of the onset, the clinical symptoms, etc., were unmistakable in their significance.

As a matter of fact, the qualitative significance of faulty memory, visual perception, learning capacity, associative memory, are expressed as definitely in concrete terms in developmental history, school progress and pedagogical measurements, social reactions, economic viability, and ethical reactions, as in the abstract findings of the psychological laboratory. In the present state of our knowledge, the behavioristic interpretation and evaluation of the anthropological and pedagogical expressions of the individual, his practical capacity for social adaptation and for meeting new situations, his power of ethical inhibition and control, his affective balance, are also as truly scientific as the result of the formal intelligence tests.

This is written with a full appreciation of the inestimable value of the contributions of clinical psychology to the means of diagnosis of mental defect. The writer would not willingly attempt to diagnose a borderline case of mental defect, or any other degree of defect, for that matter, without a thorough psychological examination. But in these borderline cases the psychological findings do not show sufficient deviations from norms in the mental processes of the subjects to be pathognomonic in the sense of a positive Wassermann or a positive Klebs-Loeffler finding. The intelligence test findings in these cases are of value as additional evidence, but they are not conclusive and should be correlated with sufficient evidence in the other possible fields of inquiry.

One has only to refer to recent heated, not to say acrimonious, discussions as to the interpretation of certain laboratory findings to realize why differences of opinion exist as to the finality of perhaps the best known tests or best known series of tests. In a recent article criticizing the automatic employment of the X, XI, and XII age Binet standards of feeblemindedness, Wallin says "I assert boldly that from one-tenth to one-half of the children in special public school classes for mental defectives are not at all feebleminded."

In many cities with special public school classes for the feebleminded, the diagnosis of mental defect in young children, with resulting exclusion from the regular public school classes and inclusion in the special classes, is based upon the findings of a mental tester, with no further certification of mental defect by a psychiatrist, or even by a practicing physician. Such procedure is most unfair to the unfortunate children and must lead to grave mistakes in diagnosis. It is only too true that a diagnosis of feeblemindedness once made is very apt to follow an individual through life, and such diagnosis closes the door of all but the most meagre opportunities for advancement.

This paper is a brief for the necessity of weighing all the evidence which any reputable method of examination can furnish before a person is pronounced feebleminded, especially if the case is of the borderline type. Among the 860 cases presented for diagnosis in this group as presumably feebleminded, there were morons, imbeciles, idiots, mongolians, cretins, spastic defectives, criminalistic defectives, cases of various forms of mental disease rather than defect, epileptics with and without mental defect or disease, persons not feebleminded, and a considerable group where further observation was needed before a diagnosis could be made.

It can not be too strongly emphasized that the proper weighing and final evaluation of all the signs and symptoms of mental defect in a given case presupposes a background of wide psychiatric knowledge and experience.

EDUCATIONAL METHODS AND THE FUNDAMENTAL CAUSES OF DEPENDENCY

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At present there is throughout the community a widespread interest in doing what is possible to alleviate human suffering, to minimize the misfortune of those whose lives have been crippled in one way or another. This is true not merely in relation to disease. Society is now adopting a more benign attitude towards those who have previously been judged by rigid ethical standards, the delinquent and the criminal. There is a desire to make their lot more tolerable; there is a hope that something may be done to restore these individuals to normal efficiency. One begins to try to understand the delinquent. There are other classes dependent upon society which have hitherto been treated by most crude methods with very little appreciation of the real problems presented by them,—the vagrants, the paupers, the alcoholics, the drug habitués and those engaged in routine vice. Society wants to help and to reform. It has not perhaps learned to discriminate between those who can be reformed, those who have better possibilities in them, and those for whom such possibilities do not exist. It has only begun to see that before dealing with the great problem of dependency with its various branches of pauperism, prostitution, delinquency, etc., it will have to understand much better than is understood at present, the exact steps which have led, in the individual case, to those conditions which are classified under these general terms.

The problem has many sides and different people are interested in different practical aspects. Some may want to alleviate the lot of those for whom little remedial work can be done; others would reform those for whom reformation is a possibility; others are more interested in general administrative and economic problems in their relation to the wider problems of the needs of the state. The aspect of the problem which we are at present dealing with is the prophylactic aspect, the problem of preventing that large proportion of cases of dependency which are preventable. There always will be wrecks and we are not discussing any utopian scheme. We merely wish to emphasize one of the most important causes of many of these wrecks, the recognition of which would be of great importance to the community. The community that would neglect completely its water supply, but would equip modern hospitals for the care of its typhoid patients, would show little judgment; but the community that would devote most of its philanthropic interest to the management of the end products of dependency—the jails, reformatories, almshouses, foundling asylums—while neglecting the efficiency of its school systems, would be no more intelligent.

The early roots of later dependency in many cases are not difficult to trace in early life. It is only necessary to refer to facts, such as those to which Healy has called attention in his admirable book, "The Individual Delinquent." The repeated offender is the delinquent who is of most significance to society, and practically all confirmed criminals begin their career in youth; a large proportion of the inmates of jails and penitentiaries are feebleminded. Mental defect forms the largest single cause of delinquency. It must not be thought that delinquency is merely the result of the natural evolution of some latent factor in the individual's constitution. It is the result of the evolution of that individual in an environment which has provided no safeguards for his development. The contented and industrious worker in an institution for the feebleminded may have exactly the same constitution as his brother who is in jail for repeated criminal acts.

When dealing with cases of nervous and mental disorder, the physician may, on looking back, see in the early life of the individual the beginning of poor habits of adjustment, which have finally culminated in the later sickness. He may see that under ideal conditions, these habits of adjustment might have been definitely modified. He may regretfully admit that it is not possible for society to mould the home environment and the neighborhood conditions of the child, so that no avoidable catastrophes take place. To reorganize the environment from this point of view, would mean something so intricate that it cannot be considered as the basis for any practical suggestions.

In the problem with which we are dealing at present, the situation is much more simple. The children who, in later life, are going to recruit the ranks of the dependents, who are going to become loafers, vagrants, alcoholics, prostitutes, delinquents, have in a large number of cases shown before they are sixteen, that they are candidates for these ranks. They have already shown well marked evidence that they are not of the same mental constitution as their neighbors. Society has an organization with which every child is forced to come into contact during a large period of its childhood, namely the school system. As a defective water supply is to be held responsible for epidemics of typhoid fever, so a careless school system may be looked upon as partly responsible for the continual supply of dependents and delinquents for which society has later to care. In each school population there are a large number of children who make little progress in their grades, who cause much annoyance to their teachers, who limit the educational progress of the normal children, while they themselves derive no compensating benefit. They are apt to be considered merely stupid or deliberately willful, or unwilling to work. They are judged by the standards of the ordinary child, and are liable to be punished for not coming up to a standard which is quite unsuited to them. The assumption is apt to be made that, as these children are less intelligent than the other children, they should merely get less of the ordinary school instruction. It is thought that it is a quantitative problem. They do not have as much intelligence as the others, the teacher aims to fill the shallow vessel with as much of the usual information as it is able to contain. This method of dealing with these children is the result of the fact that education is so frequently taken to consist of the furnishing of information rather than the formation of habits. This view of education is unfortunate for the normal child as it tends to dwarf his development, but it is apt to be disastrous to the subnormal child. The whole constitutional make-up of the subnormal child shows certain anomalies. Frequently he is unstable, with poor inhibition; often he is stubborn; he is also apt to be at the mercy of the suggestions of others; he shows anomalies of mood and peculiarities of temper; he is more easily fatigued; his limited intelligence does not make it easy for him to grasp abstract relations. He therefore lacks many of the conditions which are necessary, if the individual is to react to the higher influences in the environment, to grasp their meaning and respond to them. Correct conduct demands a certain power of inhibition, a certain ability to withstand the suggestion of the moment. Education can only develop these qualities to the extent which the constitutional limitations of the individual allow.

To neglect these constitutional limitations of the subnormal child has not merely a negative aspect; it is a positive danger.

The subnormal child whose school environment is not adapted for the development of its limited capabilities is naturally fatigued, irritable, out of touch with the environment; the natural reaction is truancy and association with undesirable companions. With limited powers of self-guidance, open to the suggestion of these companions, already in the school period the child learns shiftless, vagrant, evasive habits, drifts into inferior methods of satisfaction, such as bad sex habits, easily becomes the tool of the more unscrupulous, and enters the juvenile court; while the girl is soon taken advantage of and illegitimate pregnancy at an early age is not uncommon. These are the almost unavoidable consequences.

In the dispensary of the Phipps Psychiatric Clinic, during the first year of its activity, twenty-one women with defective mentality were examined. These twenty-one women had given birth to twenty-two illegitimate children; four of them were sixteen years of age, eleven were under twenty. The intelligence of the four girls aged sixteen was not more than that of the normal child of eight years.

To deal adequately with the whole problem of the subnormal is an enormous task. We do not have even the necessary data for estimating exactly its extent. It is, however, appropriate at the present time to point out certain conditions which have an important social bearing and which can be, to a certain extent, quickly remedied, as soon as the community takes an earnest and intelligent interest in the subject. One important factor can immediately be dealt with. Truancy, bad associations and poor habits are very frequently the direct result of the fact that the education of the subnormal child, that is, his school environment, takes no adequate notice of his constitutional limitations. The education is obviously inappropriate, and is therefore rejected by the child by means of truancy. It is quite striking to see how subnormal children, even although previously truant, may become most willing and regular attendants at school when they get that education which is suited for them. We are apt to forget the aim of education, to look upon it merely as a traditional system, to be accepted without criticism. Education should aim at the formation of habits which will enable the adult to adjust himself adequately to his actual environment. This adjustment will necessarily depend very largely upon the actual constitution of the individual. If the constitution of the subnormal child is such that he will never be a self-supporting citizen and never be able to enjoy the intellectual heritage of his generation, then his education should train those faculties which he does possess and which will make it most easy for him to get along as well as his limitations permit. His education will essentially deal with concrete activities, and the goal will be very largely efficiency in manual occupation. To give the subnormal school population the traditional educational environment is to favor the development of all sorts of aberrant trends in the subnormal children, and to increase very largely the extent of later dependency.

The effect on the home life of a reasonable management of the subnormal child at school is far-reaching. What are the first practical steps to be taken with regard to this special aspect of the situation? No adequate steps can be taken unless those responsible for the educational system represent a community which realizes the fundamental importance of education, and looks upon its school system with jealous scrutiny. The efficiency of the school system is a good measure of the moral and intellectual level of a community. In order to do justice both to the normal and to the subnormal child in any school population, some rough estimate must be made of the number of subnormal children to be dealt with, and in doubtful cases it must be possible to get an expert opinion. The school should have available the advice of a physician competent to give an opinion on the mental constitution of the individual pupil. With regard to the subnormal children, their education should be guided by the principle that their development is to be favored by modifying the environment to suit their special needs. Manual training should largely replace the traditional emphasis on academic work. When the children present very serious degrees of mental defect, the problem of course would arise whether these children should be trained in special institutions in view of the necessity of close supervision even in adult life. During the school period, society has the opportunity of making a census of the mental level of the children. It might well be arranged that those defective children, who enter some wage-earning occupation, should continue under state supervision, but in any case the supervision by the family will be very much more efficient than at present if the school management has been along proper lines. The subnormal child who leaves school is not missed as a rule by the teacher, is apt to be exploited by the parent and the employer, and is considered an economic asset rather than an individual who presents rather difficult social problems.

It may be unwise to suggest any further social machinery for looking after these subnormal wage-earners until the community has taken the primary step of so modifying the school environment that the danger of later social difficulty is reduced. This is the first step and it is one the great social importance of which is just beginning to be adequately appreciated.

SOME CRITERIA FOR THE EVALUATION OF MENTAL TESTS AND TEST SERIES*

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TEN years ago there were no mental tests nor papers on test methods demanding public attention. Only in a little spot in Paris was the method growing which has since become such an important factor in the solution of the problems raised by education, social service and mental hygiene. There was, however, a great and actual need for some such method and when Goddard, having first doubted and then proved its value, introduced the Binet scale to the American public it was eagerly adopted and earnestly used.

At first the examiners were fairly cautious but the simplicity of the scale caught the public eye and, as the material employed in giving the tests was inexpensive and as the need was great, its use grew rapidly. Testing became largely a method of plus and minus and "his mental age is so much." A simple comparison of this mental age with the actual chronological age of the child gave the so-called "mental diagnosis." The child was accordingly backward, normal, defective or supernormal.

The psychological significance of the tests, controlling factors in the environment, and physical handicaps of the individual were largely ignored. Indeed many of the so-called Binet testers could not have detected these, nor have evaluated them, even if they had wished to, because of the double lack of training and experience.

Since then new tests and new test series, modifications and interpretations of tests have sprung up as though but waiting for the first to venture into public usage. They have all met with widespread use as well as misuse; none has ever lacked some champion and the various modifications have in many instances attempted to displace each other.

For a while, in this first enthusiasm, all crime was feeblemindedness; all immorality meant lack of mentality sufficient to control one's self. All children not getting along in school were considered defective and social service meant providing rapid transit to the nearest custodial institution. Even now we frequently meet this attitude in those who are new to the work and who have not yet begun to doubt the universal applicability of a single principle.

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Gradually, however, the many problem cases, the exceptions left unsolved, the variations in test results reported by different examiners, led to the second stage in the development of mental testing. This stage was the beginning of constructive criticism and of attempts at broader and more detailed standardization of tests. The attacks upon all tests as unscientific and as mere innovations were replaced by the tolerant statement that they were "useful but—" and then came the criticism, only too frequently needed, hitting tests, diagnoses and examiners.

As we know, the first Binet scale was but a crude list of questions arranged in the order of their increasing difficulty. Then came the question as to how far a certain child, this five or six year old, that ten year old, should succeed, how far he should fail on the series. If seventy-five, seventy-two or eighty out of a hundred children at a certain chronological age answered a certain question, then surely the average child of that age should answer it. On some questions nearly every child of the age at which it was placed could succeed; on others fewer succeeded. The method, however, worked.

It is this scale, worked out for practical purposes, which has been so criticized. Let us not forget in passing to give Binet a word of praise. His method, crude, surely not based upon exact statistical theories, had within it the germ of all the ideas which have been more fully developed, and in some instances hypertrophied, in the more recent Binet revisions.

A similar method of grading the questions according to the number of children of different ages who passed them was used by Goddard in his revision of the Binet. His work ranks with the most valuable American work so far done in that he shows the percentages of children at the various chronological ages as well as at the various mental ages who do the same question, thus giving a two-plane distribution which checks itself. Unfortunately the curves representing the increased successes with increased age are not similar nor regular for the various individual tests. Out of this irregularity has arisen one of the questions on standardization of tests, namely, what per cent of the children of any one age should succeed in a test before it can be considered a proper test for that age?

This is not a question to be settled by much discussion and heated arguments. A few thousand children carefully examined by the test will instead tell us how many of each age can succeed with it and will likewise tell us whether the average child can be expected to accomplish it at six or nine or seven years of age. If 90 per cent of the six year old children succeed with it and 97 per cent of the seven year old, then surely the seven year old and probably the six year old child who fails is deficient in that ability. It is the sum of a great number of such little deficiencies which tells us that a child is mentally below par.

But the diagnosis of mental defect is not limited to gathering up and measuring the subject's weaknesses in this one field only. Such a procedure would be rather wasteful on the one hand and apt to be faulty on the other. The mental defective usually evidences his defect in more ways than one. He can no more do normal school work for his age than he can do normal work on a standard test series. He is apt to be equally poor in his knowledge of the things which a normal child picks up for himself regardless of educational advantages. All of these weaknesses are as good evidence of subnormality as a plus or minus on a Binet record sheet. They represent various parts of mental endowment and should be studied through a mental examination given under as carefully formulated conditions as those we desire for the conduction of the standardized mental tests.

The efficient Binet tester, dependent upon a limited range of observation of the child, is apt to find the child whom he calls defective, simply because his mental age is below what it should be, called something else by the diagnostician. The results of the examination of six children in an Italian family that we have encountered in our clinic illustrates the point very well. The oldest child is seventeen and tests ten, the next is thirteen and tests nine, the next is eleven and tests nine, the next is nine and tests five, the fifth is seven and tests six, while the baby is four and tests normal. When I add that only the younger children get along in school and that the older two are very much crippled, many examiners would undoubtedly call the group a defective one and query concerning the mentality of the parents. If, instead, I add that the so-called crippled condition is a disease condition and progressive, that it is marked by delayed reactions, general lack of the finer co-ordinations, a speech characteristic in its drawl; if I add also that the history is one of children first developing normally and then deteriorating, the group resolves itself into one which the neurologist diagnoses as family spastic paralysis affecting four out of the six children. The mental age did not discriminate the condition from mental defect, but an analysis of the psychological examinations beyond plus and minus and mental level had indicated that the condition was a degenerate one, similar in all of the group affected, before the full history or a neurological diagnosis were obtained. Indeed, the type of reactions in the psychological examination, together with the peculiar history, are the factors which lead to the special neurological examination necessary for the final diagnosis in such cases.

This digression will help to show how foolish it is to assume that we can diagnose as mentally defective from a psychological standpoint all those who test a certain amount below their chronological age, while all those who test less than this amount below are only backward children. Nor dare we assume that all those who test "at age" by our present test methods are normal in so far as original mental endowment is concerned.

If this is true, we can see also how absurd it is to assume that if we distribute a population according to the rating each one has made on intelligence tests, all defectives will be found at the lower end of the distribution. Nor may we assume that all found at that lower end *are* mental defectives. The problem is far more complex for, contradictory as it may seem, feeblemindedness consists of more than a present apparent mental defect. All who test up to age by our present scales for measuring intelligence are not normal. We frequently find that a boy or girl who tests at age or a bit above must, because of the *quality* of response in the psychological examination and by reason of other corroborative findings, be declared mentally defective. We just happen to have caught him in the clinic net before he has had time to prove markedly different from the normal child in the gross numerical score he obtains by mental tests.

Nor dare we say that two, or two and a half, or three, or five per cent of all people are defective and then try to find tests which will discriminate just that many of the general population, resting assured that those selected are the defectives.

Pinter and Patterson seem to lead the group which advocates such a method. They do not believe that supplementary tests nor knowledge of defectives is imperative for the diagnosis of mental defect. They suggest instead that we define the feebleminded as "the lowest three per cent of the community at large" as determined by standard tests of mentality. They feel sure their definition will also differentiate the defectives from the "moral defectives" and the "psychopathic personalities," as they designate them. They go even further than this. They decide that the present mental tests are absolutely unsatisfactory, chiefly because they do not pick out and designate as defective exactly the same percentage of children at each chronological age. The percentage, they claim, should be exactly the same at all ages if the tests are reliable.

This is a fallacy which can unfortunately be found in other places and in other articles. It is based upon what seems to be a complete misunderstanding of mental defect. We do not know, but the indications are, that at present far from all feebleminded persons can be detected in early childhood, for all mental defect does not mean the same thing. This is self-evident to anyone who has a practical acquaintance with the subject. The feebleminded person may be an idiot and be recognizable by the expert at a very early age. He may be an imbecile and appear normal or only backward for a couple of years or he may be a moron of so high a grade that he is not detected nor even suspected until he trips over the rope of social conventions and lands in the clinic for diagnosis.

Consequently the percentage of recognizable defectives should not be a definite one at each age but should probably be an increasing one. Even of this we cannot be sure unless we know whether the death rate of defectives differs from that of normals or not. The percentage of potential or incipient defectives is probably about the same at all ages but our means of diagnosis have not advanced far enough to enable us to detect all who are actually below par at the present time, let alone the more difficult task of prognosis of those who are now apparently normal.

There are in some instances other significant abnormalities which allow of a diagnosis of mental defect before it is shown by mental tests, but in those cases where the child's history indicates nothing abnormal or peculiar in other lines, our mental tests often do not detect the arrest of development which is to evidence itself in a year or two. In other words, we are to-day using tests of differential diagnosis, not of prognosis. We need the development of methods of experimentation which will indicate positively any qualitative differences that may exist between the normal and the abnormal child. We shall then need the standardization of the tests showing such differences. This will be a matter requiring much time and a wide range of experiments but the resultant increased efficiency of clinical methods will surely repay all efforts.

Jaederholm and Pearson have made a study which in its preference for theory rather than actual fact is somewhat similar to that of Pintner and Patterson. They made a survey of the normal children in a community and of the defectives from the same community who were separated and under custodial care. They then tried to put the two groups together in a distribution according to intelligence rating. When this did not give them a pure Gaussian curve,* they did not accept it as evidence that the thing they were studying was not purely Gaussian in its distribution but attempted a statistical correction to make the findings such as they were intent upon proving. Their findings were probably faulty in the first place, as the Binet without much corroborative testing was the basis for the distribution, and as many deviates were probably thrown out through the group being a selected one. A more intimate acquaintance with the subject outside the laboratory might well have led to a different attitude in these workers.

As I have said, we have not reached the point where our methods for detecting feeblemindedness are perfect. Only by a very careful and prolonged comparison of normal, defective and borderline cases shall we be able to know the tests that indicate significant differences between the groups. It is quite possible to make tests of abilities not absolutely necessary for normality. These are aptitudes over and above normality in some instances, but they may be part of the abilities of a very defective child just as well, or they may be part of his defect, but not a significant part.

Because of this we dare not depend upon any one test for detection of the defective. Indeed, we may not depend upon any one test series unless it be more varied and comprehensive in design than those in use to-day. The mental defective is not he who is lacking in one attribute, but he who is lacking in so many ways that he cannot make shift in an emergency even though he utilize all of the abilities he has.

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*A theoretical curve showing a perfect distribution of the frequency of variants of the condition being studied. The curve is symmetrical and bell-shaped in form with the high central point indicating the most frequent or typical form while the greatest deviations are indicated by the extreme tapering ends.

Kohs has declared that when we consider children who are over fifteen years of age, the only child who is really a problem is he who tests between 10^4 and 11^2 by the Binet. All above 11^2 he finds to be normal individuals, and there is no doubt in his mind that all below 10^4 are defective. He also points out similar limits of normality in younger children.

One could criticize such a dogmatic statement from any one of a number of standpoints. Fatigue, a long journey before the examination, a chance misunderstanding of one or two questions due to some previously developed attitude, ill health, undetected sense defects may, one or all, handicap a child so that he will test two or three points lower than he will twenty-four hours later or than he has a day or two previously. Even the mere fact that a question which is one of borderline ability for the child was given first or last in the series may make the difference between success and failure.

But even if we discard these obvious chances of variation in rating, it still seems a rather hazardous thing to pin one's work down to a belief in the infallibility of any one measuring system. It is a serious matter to put the social ban of the term feeble-minded upon any person, and we should not practise so doing unless we have studied every side of the situation. From the psychological standpoint we still need the open-mindedness which enables us to use every possible means for the intensive study of the individual. If we ally ourselves too closely with the use of any one procedure, we develop an attitude which at least leads to a personalized re-valuing of all other data, which is approved or discarded according to its correlation with the data dug out by our pet tool.

Let me mention just one illustration of the premature and contented usage of imperfect tests. Several years ago the question of imaginal type first aroused general interest. The fact as to whether one remembered better and thought better in sounds heard, or in things seen with the mental eye, or in words recalled as though spoken, seemed to be an essential bit of evidence in a thorough mental examination. Well and good. But the matter did not stop there and while the laboratories were trying to find some objective test which would discriminate the auditory and the visual from other types, the sophisticated applied psychologists began testing that very thing. They decided that because a person remembered things he had seen these must be remembered in visual imagery; things heard must be held in auditory memory. They decided that if a person could remember only five numbers when they were read to him and seven when he saw them printed in a row, he was visually minded. They did not consider that he saw the written ones all at the same time, that this time was consequently longer and that he might because of this have gained a better impression of them. Throughout they inextricably confused mode of presentation with mode of remembering.

We know now that this type of testing was absolutely wrong in its premises. A man who hears a thing need not retain it as a thing heard. If he is eye-minded, he is apt to remember it by imaging it as a thing seen and so he may recall it thus. Others may recall the same thing in different ways. In general, recall or memory seems to depend more upon one's ability to use one's mental images in whatever form they come, rather than in ability to reproduce impressions in the same modality as that in which they were orginally experienced. Indeed we may some day find that the mental defective is one who cannot use his mental machinery to make this sort of transfer or substitution. Meanwhile the reputable clinical psychologist agrees with the experimentalist that we do not know how to tell imaginal type unless aided by the subject's own account of what happens, and we cannot rely upon this account when given by untrained observers.

In just this way other fads and freak methods will take flight as research and growing files of clinical data replace apriori assumptions. The future of clinical psychology depends upon rational freedom from such attitudes of finality.

I suppose that the final aim of mental examination methods is procedure of such perfection that the records which can be obtained of the mental behavior of a person will be such that there will be no need for anything but a perfectly trained technician to apply them. The delicacy of the tests and the accuracy of norms will replace the examiner's experience with mental defect, psychoses, epilepsy and other mental abnormalities. That we should ever reach this aim is far from probable, nor does the improbability seem entirely a thing to be lamented. As long as we are dealing with human beings, some of the human element must be left or else our whole attitude is wrong. An approximation of this ideal must nevertheless be worked for. We may hope for great progress and advance in our methods, and these may perhaps be furthered by a consideration of some of the following points.

The mental test is a definite task which the subject is to perform after explicit directions that shall not only control his behavior but shall give him a definite idea of the goal to be achieved. The environmental conditions are supposedly favorable in that they are to be neutral. The performance of the task is also conditioned by the attitude of both examiner and subject. A good bit has been written emphasizing the necessity of putting the subject at his ease but little attention has been paid to the personality of the examiner. One of the first essentials for advance in mental examining to the point where the results of the various laboratories will be comparable appears to be a standardization of examiners or a working out of the personal equation of psychologists. Even the rating of an examiner as easy, hard, rather variable or exact would be a help and a step in the right direction. Astronomers have worked out such an equation for the reading of the passing of a star. If necessary for such research, why should we not consider it when dealing with evaluations of human behavior?

The mental test series are groups of tasks to be done. The group is partly similar, partly dissimilar. The work required to pass the tests may be such as needs only mental processes and verbal statements of reactions, or it may require manual co-ordination, kinaesthetic accuracy or a combination of many functions. All of the tests in a series need not correlate highly with one another, so far as we know, any more than different types of learning always give high correlation coefficients.

Test standardizations must be based upon empirical data instead of upon statistical theories. The study of unselected groups and community surveys is a means to this. In such work the same tests should be given to the whole group and the results upon the individual tests evaluated. The defectives must so far as possible be known from some other diagnosis. Such a diagnosis or determination cannot be based upon one thing. Stigmata of degeneracy will not get one very far except with the low grade cases, nor will a physical examination get one much farther. Failure to pass the tests of society, *i. e.*, moral, social, conventional or economic deficiency, together with educational acquisitions not up to what the person has had a chance to get, is good corroborative evidence of mental defect. Mental test findings must be compared with these types of evidence. The two must correlate highly.

Any test should give an increasing number of correct responses among children progressively older. Whether the distribution of these successes for any one age is Gaussian, that is whether brightness at any one age has as a factor a more successful record on the test under consideration than that made by average children, we cannot say beforehand. Nor can we say whether defectives give different reactions on any one test until we have studied a large number of both normals and defectives and compared them.

If all children do a test then it is of course valueless for diagnostic purposes, but it need not be if it indicates variations which are significant in even a small part of the group. We must get away from the idea of the universally applicable test or test series as the only type of valuable measure. An immobile examining program requiring the usage of the same series of tests upon every person examined is the most deadening of devices. Only those tests should be used in the examination of an individual which reveal important and pertinent facts concerning his abilities and disabilities.

But even if a certain test does give a Gaussian distribution, that is not a sufficient demonstration of the diagnostic value of the test so far as the diagnosis of mental defect is concerned. The curve must also have a mode which is an indicant of the child who is seemingly normal so far as the process under consideration is concerned. The matter is so complex that seeking a test series that will grade all people into a two-plane distribution of normality and defect must be discarded, no matter how its simplicity appeals to us. Instead, we must use a great number of such distributions and measure the individual upon all of them. He who is below par in a sufficient number of them will be the defective. What this number is, both relatively and absolutely, will have to be determined by a statistical survey of all cases studied. We have a slight beginning of this method in our test series but it must be greatly amplified. The diagnosis of the borderline case will become easier the greater the number of such tests on which his position is ascertained. Another factor aiding in the evaluation of tests will be a more liberal use of correlation coefficients and the resultant correction of opinions drawn from the use of distribution curves alone.

So far, however, mental tests individually and serially are not final. They have reached the point of recording the grosser quantitative differences between individuals but comparatively little has been done on the standardization of qualitative variations. This criticism does not mean that we must drop the present methods and begin over again, but it does mean that we must recognize their shortcomings not only in order that we may more accurately evaluate results obtained by them but that we may improve them. Despite all that we may say, mental tests are yet little more than a ready-made method of applying one's knowledge and experience in a uniform way in all cases.

Because of these shortcomings in our tests and methods and likewise because of our desire to improve them, the psychological examination should be conducted in as open and unbiased a manner as possible. The individual should always be regarded as normal until proved otherwise. He must be given the benefit of the doubt whenever doubt arises. Since no existing test seems to be infallible, he should be given every test that seems applicable and significant, when he is considered as an individual. Such constantly adapted grouping of tests requires an examiner who not only knows but acts his psychology. When all of the individual variations of the subject have been studied and evaluated, when sufficient data have been assembled to make a clinical picture of brain activity which is coherent and complete, then, and then only, is diagnosis allowable.

HOW WE MAY DISCOVER THE CHILDREN WHO NEED SPECIAL CARE?*

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THE question which I have chosen to discuss implies the fact that there exist children who need special care and the conviction that it is our duty to discover them and to give them the attention which their welfare demands. Science leaves no ground for the denial of human inequality, and experience daily attests the necessity of recognizing it in all human relations. Classes exist even in a democracy, and they are no less real than those of an aristocracy, but, unlike the latter, they are based upon a multitude of varying bodily and mental characteristics, both innate and acquired, instead of upon the single accident of birth. Our democratic conceptions of human equality and freedom are inspiring, but also in a measure misleading, for, on every hand, innate tendencies and early environmental influences definitely condition our choices and determine the measure of our success. In education, and indeed in all forms of social endeavor, we face the necessity of adapting our modes of treatment to individual capacities and needs. Our opportunities for increased effectiveness of service through a study of the individual are unlimited. Our eagerness is adequate to the social demand; our knowledge of conditions is rapidly increasing; and our methods of observation are improving. Never has the outlook for intelligent and just recognition of individual differences or inequalities been better than at this moment.

As a practical approach to the great task of better suiting educational treatment to the needs of the individual, I wish to suggest the classification of children according to their major characteristics of body and mind; for if we may not at once deal with each child according to his particular traits and tendencies, we may at least be able so to classify him that his needs shall be more satisfactorily met than they are at present.

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My plea is for the classificatory study of children as they enter school, since social service, whether medical, educational, or re-educational, finds its greatest opportunities early in the life of the individual. Indeed, what is done for the child during the first ten years of life is infinitely more important than anything which is likely to be accomplished later. We should strive, alike, through the careful study of the individual, and through adaptation of educational methods to special needs, for prevention, correction, and the increasingly satisfactory guidance of development. In a word, our educational methods should be individualized and specialized in accordance with the varieties of human nature and needs in so far as is economically possible.

The following five classes or groups of individuals are suggested as probably of greatest practical significance in the present state of our psychological and educational knowledge. Careful study of the child in home or school should enable us to place him with assurance in one or other of these groups and to treat him, thereafter, not merely as a child but as an individual with certain special and perhaps peculiar needs. The classes are: (1) The intellectually superior or supernormal; (2) the intellectually inferior or subnormal; (3) the intellectually dependent; (4) the affectively or instinctively defective; (5) the mentally normal, typical, or average. Each of these classes may now be defined in terms of the essential characteristics, the social significance, and the needs of its members.

As intellectually supernormal or superior, we may characterize those children whose present capacity and promise of development point to exceptional mental ability, and who are likely to become leaders in the community. At present, they often are as much handicapped in our schools as are their intellectually inferior companions, for whereas the latter are forced beyond the limits of their mental capacity, the former have inadequate opportunity for the expression of their powers. The social importance of specialized treatment, both intellectual and manual, for this group of children is incalculably great. Upon them human progress chiefly depends. Recently, much attention has wisely and profitably been given to the so-called feeble-minded or intellectually weak. We are now beginning to see that, however important this humanitarian work may be, it is even more important that careful attention and special care be given to the intellectually superior.

Intellectual inferiors are the simple-minded members of the community, technically known as morons. While capable of simple forms of manual labor, and under favorable conditions of self-supporting existence in a fairly complex environment, they are relatively incapable of contributing to social progress, and from the disinterested standpoint, unfit for parenthood. They are prone to immorality, and tend to perpetuate various types of mental inferiority and thus innocently to burden, if not also to deteriorate, the race. It is the clear duty of society to provide as adequately as possible for the special training of these individuals in the kinds of work of which they are capable. The indications are strong that our ordinary public school methods and materials are highly inappropriate, for many of these children, even in the primary or grammar school, reach the upper limit of their intellectual development. Thereafter educational effort is wasted upon them, unless it happens to be adapted to their special mental level and to their industrial or vocational possibilities. That the children of this group urgently need special forms of educational treatment, and that these should be intensely practical and dominantly industrial, rather than in the narrow sense intellectual, is fairly obvious.

The intellectually dependent are so designated because of their incapacity for self-supporting activity, whether manual or mental. They are at once eugenically unfit for parenthood and incapable of sharing in social progress. In this group are found idiots and imbeciles. They are seldom grave social menaces, but are rather appropriate objects for human sympathy and pity. All belong in especially adapted homes or institutions for the care of mental defectives rather than in our public schools or elsewhere in the community. It is alike unfair to them and to the remainder of the school population that they should be treated as normally endowed individuals. Happily, under present conditions, but few intellectual dependents find their way into the schools.

Instinctively, emotionally, or morally peculiar or defective children are quite commonly described as queer, uncontrollable, or even lacking moral judgment. We have no suitable term for this class of unfortunates. Perhaps, affective deviates, may serve our purpose in lieu of something more satisfactory, for the essential peculiarity of these children is overdeveloped, underdeveloped, or unusually related instinctive modes of behavior and feelings or emotions. These peculiarities often appear in connection with excellent intelligence, and they are socially and economically all the more serious because of this fact. Usually affective deviates are classed with the feeble-minded, but it should be noted that their mental defects are strikingly different from those of the typical imbecile or moron.* In the group of affective deviates appear juvenile delinquents, the uncontrolled or incorrigible, and from it are recruited criminals, and in general those individuals who tend to become social derelicts and menaces. The conspicuous characteristics of the children who belong in this class are instability, irresponsibility, and carelessness of the welfare and rights of others. No type of child more urgently demands careful study and special treatment, in home, school and community than this. Society can ill afford to overlook this need.

Those individuals whom we call normal and who are also, as a rule, fairly typical or average, constitute the remainder of the school population, from 80 to 90 per cent of the total. Although in these children also individual characteristics are conspicuous and may not safely be ignored, the need for individualized educational treatment is in no sense comparable with that of the four smaller groups already described.

The frequency of occurrence of these five types of children is of importance. At present statistics do not justify dogmatic statements, but the indications are that one or two children in every hundred of the school population are intellectually dependent; that four to six are intellectually inferior; that approximately the same number is intellectually superior; and that one or two are affective deviates. The remaining eighty-four to ninety individuals may be classed as normal.

We come now to the special topic of this address,—How may we select the children who need special care? At present, intensive individual study of every child for the purpose of educational diagnosis is impracticable because of expense. The important question is, can we discover some relatively inexpensive method of working toward the early and efficient discovery of individual needs. I believe that such a method is at hand, and I wish briefly to describe it in connection with a plan for the thorough survey of the population of a school system.

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*The general impression that all mental defects are intellectual impels me to call attention to the following facts: Feeblemindedness, or better, mental defectiveness, is of several sorts. The most important varieties are the intellectual and the affective. Intellectual defectives are more or less stupid, dull, simple-minded. They may, however, possess relatively normal instincts, excellent self-control, and ability to get on fairly well in a relatively simple social environment. On the contrary, affective deviates, or the affectively feebleminded, are peculiar in their instinctive equipment, quite irrespective of their intellectual capacity. The essential differences of these two types of mental unfortunates clearly appear from the study of groups of juvenile delinquents, some of whom exhibit both intellectual and affective defects, others only the affective.

A staff of well trained and experienced experts, including a physician, a psychologist, an educator, and a social worker should be organized. These experts should study the entire school population of some city, county, or state, by means of the best methods of physical and mental measurement available. The following is proposed as an economically and scientifically possible procedure in an extensive survey whose end is the discovery and classification of such individuals as need special educational treatment.

As initial procedure, the experts should make physical, medical and psychological examination of the children by groups of twenty to fifty. The purpose of the group examination should be the discovery of physical and mental peculiarities, defects or degrees of development which are actual or possible handicaps in school or vocational work, and which suggest the desirability of more thorough study of the individual as a basis for educational or medical treatment. This examination should be inspectional in its physical and medical portions, but it should be conducted systematically and according to a definitely pre-arranged plan. The psychological examination, on the contrary, should consist of a series of mental measurements to be made simultaneously on all children in the group in from thirty to sixty minutes.

By means of the group examination, which would have the advantage of demanding but a fraction of the time necessary for individual examinations, the examiner should be enabled to select those few individuals (perhaps 10 or 15 per cent) who belong in the four especially significant categories enumerated above. All other children having been passed as relatively normal or typical, the experts would naturally turn to the more special and detailed study of the exceptional pupil.

The next step in the survey would be the reasonably thoroughgoing physical, medical, and psychological examining of each pupil selected by the group examination as in any way exceptional. These intensive individual examinations might be expected to yield data for definite decision as to the classification of the individuals.

Finally, the examiners should make a detailed report concerning the physical and mental findings for each individual especially examined together with suggestions or definite recommendations concerning proper, desirable, or urgent educational, medical, or vocational treatment.

The special methods of examination may not be described in detail, but it is necessary to indicate certain salient features of the proposed modes of mental measurement.

The varied measurements necessary for physical and mental description or diagnosis are widely known and appreciated, if not perfectly understood. Mental measurements, on the contrary, are little known and pretty generally misunderstood, for the mental is thought of as intangible, immeasurable, even as mysterious, and most persons find it either impossible or extremely difficult to imagine how anyone's mind can be so examined that it may be described with reasonable definiteness and precision. In view of this condition of affairs, it is pertinent to state that the psychological examiner measures certain forms or aspects of behavior,—what the individual does, not what he feels or thinks. It is the function of the trained examiner, by contrast with the casual observer, (a) to arrange certain definitely describable conditions of reaction, so that the same situation may be presented to each person who is examined; (b) to ascertain, by the extensive application of a given method, what may be expected of the normal or average person; (c) to measure in some definite way the response of a given individual to the particular situation which is presented; and (d) to evaluate this response in terms of a standard of judgment or norm.

One or two illustrations may render this account of the examiner's task more intelligible. As a test of reasoning power, seven capital letters, printed on a card, are placed before the subject with the request that he arrange them in order of increasing total length of line used in the letters. From previous application of the test, the examiner knows the average time necessary for reaction, and the degree of success (amount of credit). He therefore is able to compare the performance of any individual with a standard of expectation or norm and to state that the subject in question falls below or exceeds expectation by a definite amount. Or again, as a test of memory, the examiner reads to the subject a certain passage, and thereupon asks him to reproduce what has been read. A careful record is made of the subject's recall, and credit is given according to the number of ideas which he correctly reproduces. This, in turn, is compared with a previously established standard or norm and the subject's performance evaluated.

Thus the psychological examiner, by presenting most diverse types of situation to his subject, is able to obtain fairly representative and reliable records of behavior, and in the end to offer a serviceable description of the person's mental constitution and capacities, or better, of his reactive tendencies and capacities.

Among the conspicuously important mental processes or aspects of behavior which are commonly measured and which assuredly would have to be considered in any thoroughgoing study of a school child are ability to sense by ear, by eye, by touch; to perceive or observe the qualities and relations of objects; to learn to respond adaptively to typical situations (habit formation); to recall; to imagine; appropriately to resist suggestions; to arrive at practically serviceable judgments; to command information and favorable modes of expression; to co-ordinate various forms of response in the attempt to express ideas; to reason and act out the conclusions achieved.

Behavior is multiform, and there are many interesting and important aspects which may be measured, but for educational purposes, only those of chief practical importance may be considered. A school survey would necessarily involve the careful selection of mental tests. One representative group of tests would constitute the preliminary or class examination, another group would similarly constitute the intensive individual examination. Of the value of these tests, the most satisfactory criterion is successful living, and the wise selection of methods of measuring mind becomes increasingly possible as data from the psychological study of human failures accumulates. Careful psychological examinations of delinquent, criminalistic, immoral, shiftless, unstable individuals, as they appear in our varied public and private institutions, are being made, and contrasted with the results, are such as are obtained from like studies of those who have made life a success.

Hundreds of serviceable methods of measuring aspects of human behavior are available. There are ways, even good ways, of studying the human mind and its expressions, but there is a lamentable scarcity of adequately trained, experienced, intelligent, and wholly competent users of these methods. There is no more difficult task than the scientific study of man as a conscious and active being. Psychological examining therefore demands exceptional insight, intelligence, and skill, in addition to the mastery of the essential principles of scientific method and technical training.

No *thorough* study of a relatively large and representative group of school children has even been made. Studies of educational methods and machinery abound. Their importance is undeniable, but how much more important is accurate knowledge of the characteristics of the human materials for which our educational system exists. The physician who ventures to prescribe by rule of thumb, ignorant or careless of the symptoms of his patient, forfeits the respect of his profession. Are we not, as teachers, prescribing educational treatment prior to intelligent diagnosis, and even in utter ignorance of the chief physical and mental characteristics of our pupils? I must plead guilty. That this state of affairs is unworthy of our intelligence, of our boasted educational progressiveness, and of our sense of justice, cannot be questioned.

We urgently need the thorough study of the population of a school system as an object lesson. Only thus can the road be cleared for rapid progress toward intelligent individualization of educational procedure. The movement for mental hygiene which has already done much to improve the condition of the mentally afflicted is bringing new light not only into our hospitals, asylums, and schools for defectives, but even into our public schools.

FEEBLEMINDEDNESS AS SEEN IN COURT*

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THE feebleminded form the most important single group of which our courts need to take cognizances. They furnish a substantial nucleus for that most expensive body of individuals who clog the machinery of justice, who spend their lives in and out of penal institutions and who furnish data for the astonishing facts of recidivism which have served to awaken our social consciences to the need of more adequate treatment under the law for repeated offenders.

The duty of criminal law is the protection of society from anti-social acts. In this capacity the court stands as one of the greatest bulwarks of society in insuring social welfare. Thousands of the individuals who are yearly arraigned charged with various offenses are deterred from further anti-social conduct. These offenders profit by the lessons learned from arrest and detention, judicial reprimand, short term sentences or probationary treatment. They are particularly benefited by probation, for this instrument for dealing with the delinquent is literally working wonders when used in accordance with scientific methods. As one prominent prison official has put it, "Probation is fast breaking down prison walls." There remains, nevertheless, a very well defined group of offenders who do not profit by the usual methods, who fail to respond properly to any form of treatment, who after being released from prison very quickly find themselves again in court, who are usually surrendered when placed on probation, if they are not from the first placed in "inside probation"—that is, within homes and institutions not penal in character—who seem totally unable to adapt themselves to society's laws and customs and thus are arrested over and over again. The success of probation in dealing with other offenders has simply served to render more prominent the group made up of such individuals.

An examination of this class indicates that in from twenty-five per cent to forty per cent of cases we are in reality dealing with feeblemindedness. In studying a group of one thousand offenders all of whom presented difficult problems and were selected by the court and probation officer as needing mental examinations, I found thirty-six per cent to be feebleminded. Let this not be understood as representing the percentage of feeblemindedness among offenders in general. This study, like other studies coming from penal institutions, was made in a selected group, for under our present system all those believed to be capable of reformation under probation are given the opportunity which probation affords. In consequence we find a much larger percentage of dull and incapable individuals among those sent to penal institutions than among those placed on probation and, as a matter of course, a larger percentage of feeblemindedness. Such studies are to be interpreted as showing conditions that exist only in the group investigated. If twenty-five, or thirty-five or forty per cent of selected and difficult cases among repeated offenders in court or among inmates of penal institutions are found to be feebleminded, it must not be assumed that the same proportion of all offenders will be found feebleminded or that crime is to be explained on the basis of feeblemindedness to any such degree.

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* Read at the Conference on Feeblemindedness of the Massachusetts Society for Mental Hygiene, Ford Hall, Boston, December 14, 1916.

The most reliable studies in the psycho-pathology of crime seem to indicate that not more than ten per cent of offenders in general are feebleminded notwithstanding the fact that this ten per cent give almost as much trouble to those charged with their care as all the rest put together. It is this ten per cent that form the very backbone of recidivism the treatment of which has been so unintelligent, so expensive, and so futile simply because society has failed to recognize that feeblemindedness, not crime, is being dealt with.

It is with those feebleminded men and women, as one sees them in court, that we are now concerned. An analysis of the histories of one hundred feebleminded individuals, taken without selection from the files gives us the following social data:

All showed sufficient deviation in childhood to have made an early recognition of their condition possible and to have warranted the institution of measures to prevent the careers that with reasonable certainty could have been predicted. The following table indicates the inability of these persons to profit by the training afforded them in the public schools. Living in a state having a compulsory education law, nearly all entered school at the usual age and most of them remained until 14, 15 or 16 years of age.

Grade Reached in School

Grade	*Per cent*
Primary	4
First grade, grammar	11
Second grade, grammar	4
Third grade, grammar	12
Fourth grade, grammar	14
Fifth grade, grammar	23
Sixth grade, grammar	11
Seventh grade, grammar	9
Eighth grade, grammar	7
Data not obtained	3
No schooling	2
Total	100

Twenty-seven per cent were able to get beyond the fifth grade, whether by their own efforts or whether forced up from year to year, in order to get rid of them, I do not know. However, these percentages should be carried in mind in connection with some tables that are to follow. Sixty-eight per cent of the cases were never able to get further than the fifth grade. The poor character of their school work showed their unfitness for the training society demands of all its future citizens and indicated the extent of the mental handicap which demonstrated itself later on in inability to compete on equal terms with their fellows in the more serious struggles of life. *Recognized as failures in the institution which is designed to train men for life's battles, these unfortunates were set adrift in early adolescence to earn a livelihood.* The following table shows just how well this was accomplished:

Economic Efficiency

Employment	*Per cent*
Regularly employed	4
Irregularly employed	21
Odd jobs	28
Work at home	13
No employment	34
	100

Seventy-five per cent were not self-supporting. Only twenty-five per cent could be considered as definitely self-supporting.

Is it any wonder that being economically inefficient these neglected feebleminded individuals drift aimlessly through life, falling into the hands of charitable organizations, criminal courts, penal institutions and almshouses?

Not only were they incapable of measuring up to the educational or economic standards met by their normal fellows, but they were equally incapable of conforming to the standards of conduct of the community in which they lived. And so they come before the bar of justice. Here we see the same lack of learning capacity, the same inability to profit by mistakes demonstrated so strikingly in their failure to advance in school and later to earn a livelihood, again shown in their inability to profit by the usual treatment meted out to offenders in court. If put upon probation, they have to be surrendered or placed on inside probation in such institutions as the House of the Good Shepherd or the Welcome House. If sent to prison, on being released they soon appear again in court to re-enact the same process.

The following table gives some idea of the frequency with which the machinery of the court had to be employed in handling these individuals. It should be borne in mind that all these records are recent ones and that most of the individuals have in addition old record cards which were not considered.

Number of Arrests

Offense	*Arrests*
Drunkenness	1,436
Chastity	163
Larceny	45
Assault and battery	11
Violation of parole	150
Vagrancy	4
Carrying revolver	1
Breaking glass	3
Profanity	2
Common brawler	1
Possession of drugs	8
Stubborn child	1
Total	1,825

The average number of arrests was 18.25. The futility of the methods of treatment which were employed is demonstrated by their apparent inability to profit by measures which succeed with other offenders and the unfailing certainty with which they return to be dealt with again.

No matter what is tried, the effect seems to be the same. If released by the probation officer, they are soon back again. If brought to court and reprimanded by the judge, they will soon appear in court again. If put upon probation, their chances of completing it successfully are so small as to be almost negligible. If sent to prison, they are locked up within a short while after being released. The two following tables will indicate some of the methods of treatment tried by the court:

Probation

No. times placed on probation	Average	No. of times surrendered	Average	No. of times on inside probation	Average
432	4.32	220	2.20	118	1.18

These one hundred feebleminded individuals were placed upon probation four hundred and thirty-two times, in one hundred and eighteen cases upon inside probation, spending within the House of the Good Shepherd or the Welcome House the entire period of their probation. Three hundred and fourteen times they were tried on outside probation, secured employment, given every chance to make good and helped whenever possible, but nevertheless they had to be surrendered two hundred and twenty times. In short, out of the four hundred and thirty-two probationary periods, they did not quite average one successful probation apiece. The chances were more than four to one against their being able to conduct themselves satisfactorily during a six months' probationary period.

Penal treatment was also tried in these cases.

Penal Treatment

No. of sentences	Average each	Length of time sentenced	Average each	No. of indeterminate sentences	Average each
735	7.35	106 yrs.	1 yr.	250	2½

Seven hundred and thirty-five sentences were imposed, or 7.35 each, amounting in fixed time to 106 years. Two hundred and fifty indeterminate sentences, such as to the State Farm and the

Reformatory for Women where the time to be served is not fixed, are not included in this number.

Finally, as an adequate explanation of all this mal-adjustment manifested in failure in school, inability to earn a livelihood and in failure to conform to the standards of conduct of the community, the following table is most significant:

Mental Level

Level	*Per cent*
Between 7 and 8 years	4
Between 8 and 9 years	30
Between 9 and 10 years	41
Between 10 and 11 years	25
Total	100

Though all were adults in years and physical development, seventy-five per cent had attained only the mental level of children below 10 years. Remembering that seventy-five per cent were not self-supporting and that seventy-three per cent got no further than the fifth grade in school, is it not plain that we have been considering only a group of mental children, attempting to compete on even terms with adults in the great battlefield of modern industry, held to the same responsibility for conduct and dealt with in the courts by measures designed for persons able to profit by experience? What would society have gained if the feeblemindedness of these mental children had been recognized when it first showed itself and they had been dealt with upon that basis? All this economic waste would have been saved. These individuals would have been protected from their own weaknesses and would have been made happy and useful in a limited environment created for their special needs.

It is too late to repair the damage to these human lives which has already occurred. Even now, however, it is worth more to society, it is clearly more economical and it is undoubtedly more humane to provide treatment suited to the needs of these individuals than it is to go on locking them up in jails and turning them out again and then repeating the process indefinitely.

In failing to interpret correctly the condition of these weaker members, the community has acted unintelligently. Our courts should not continue to commit to penal institutions offenders whose central nervous systems are so conspicuously undeveloped that adaptation to the conditions of normal life is impossible for them.

THE COMMUNITY VALUE OF THE OUT-PATIENT DEPARTMENT OF THE HOSPITAL FOR THE INSANE

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THE time was, and not so very long ago, when the state hospital stood isolated from the life of the community. Except in the matter of receiving, treating and discharging patients, the hospital had scarcely a point of contact with the world outside its walls. The echoes of the great world struggle for social betterment did indeed penetrate the barriers of conservatism and traditionalism which encompassed the hospital, but they aroused only sporadic attention and academic discussion. For a time they failed to add recruits to the forces of social progress. The fault, however, did not lie wholly within the institutions. There were not lacking leaders who sought alliance with agencies whose aims and early endeavors forecasted the developments of to-day but they were the exception and not the rule. The attitude of the public, the influence of ancient prejudice and ignorance, and perhaps association with that peculiar something which cannot endure even the chains of a definition, the so-called "stigma of the asylum," discouraged and often defeated these efforts.

In view of the broadening field of social endeavor to-day, one may be pardoned for harking back to these earlier times. The contrast is so impressive that it commands attention. It seems but yesterday since we stood aloof, unhelpful, detached, as it were, from all those intimate human relations and public duties that absorb our interest to-day. A new spirit animates us, under the impetus of various influences that call for the exercise of higher ideals and a wider conception of duty. The hospital of to-day does not confine itself to the immediate task of remedying the effects of evils that are largely social in origin. It reaches out into the community and, if it may not remove the source of evil by radical operations of its own, it at least points out the necessity for removal and indicates the instruments and methods. From its storehouse of experience, its wealth of study and research, it distributes a clearer knowledge of those problems of social and moral progress which come within its province. Its ultimate aim should be the dissemination of information as to the origin and development of evils whose menacing increase is directly conditioned upon the amount of misinformation and misunderstanding extant.

Two of the modern agencies which are tending to bring the state hospital into more vital relationship with the community are the out-patient clinics and the social service departments of the hospital. The first effort to organize out-patient clinics generally in the Massachusetts state hospitals was made in 1914. Previous to that time, the Massachusetts School for Feebleminded at Waverley had for twenty-five years held a clinic at its hospital; the Psychopathic Department of the Boston State Hospital had been holding out-patient clinics since it opened in 1912; the Norfolk State Hospital for Inebriates had for some time held out-patient clinics in Boston, and the Danvers State Hospital had made plans for an out-patient service.

In August, 1914, the State Board of Insanity voted "that each hospital then doing out-patient work should extend the same along the general plan outlined for all institutions in order that the work might be uniform, and that those institutions which had not been doing any out-patient work should, at the earliest possible date, establish out-patient departments and out-patient clinics in the several large cities in their own district, preferably in the evening when patients needing such advice could conveniently attend without interfering with their duties or jeopardizing the positions they might hold."*

In establishing a policy which would effect all institutions for the insane and feebleminded, it was the intention of the board to stimulate each hospital to "reach out," as Dr. Adolf Meyer once said, "into the community and be responsible for the mental health of the community or district which it covers." At the same time all the hospitals were urged to add to their staffs after-care or social service workers who could assist in the work of the clinics.

It was hoped that the out-patient departments would eventually cover the work of the clinics, the after-care or social service work, mental hygiene and the boarding out of patients. It was also hoped that their organization would stimulate the discharge of cases earlier than had before been possible, for it was thought that many suitable patients could safely be sent out if clinics were established in or near the town or city where they resided. It was planned that the after-care or social worker should get in touch with the new patients when they first came to the clinics, should see the discharged cases or look them up if they did not report, and as often as possible interview members of the families of patients in the hospitals who could come to the clinics but who could not conveniently come to the hospitals.

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* Recent Extention of Out-Patient Work in Massachusetts State Hospitals for the Insane and Feebleminded, by L. Vernon Briggs, M.D., and A. Warren Stearns, M.D., *American Journal of Insanity*, Vol. LXII, No. 1, July, 1915.

The board believed that the out-patient department would be a step of the first importance in the prevention of mental disease in the state, and that the supervision and after-care of patients would prevent the return of many who had been discharged. Out-patient departments are not alone for medication and treatment, but also for education and for the interpretation of the functions of the great state hospitals.

At the end of seven months, or on April 1, virtually every part of the state was covered: clinics had been opened by the Worcester State Hospital at Worcester and Spencer; Taunton State Hospital at Taunton, Fall River and New Bedford; Northampton State Hospital at the hospital, at Springfield, Greenfield and Pittsfield; Danvers State Hospital at Lawrence, Gloucester, Haverhill, Lynn, Salem and Newburyport; Westborough State Hospital at the hospital and at the Homeopathic Hospital in Boston; Gardner State Colony at Fitchburg and Winchendon; Massachusetts School for the Feebleminded at the school, at Worcester, Taunton and Fall River.

The bulletins issued by the State Board of Insanity from December, 1914, to August, 1916, give a fair idea of the usefulness and activity of the work thus begun. For the three months ending April 1, 1915, there was a total of 2,536 visits to the clinics, an average of 845 a month for the nine institutions. The number of first visits for this period was 691, or an average of 223 a month. During the second quarter of 1915, there were 739 new patients examined at the clinics and the total number of visits was 2,471.

During the months of July, August and September, 1915, over 1,200 persons presented themselves at the clinics for medical advice, diagnosis, or, in the case of discharged patients, to report on their parole. Over 33 per cent of this number were persons who had had no previous relations with the hospitals, but who came on their own initiative, or were referred by physicians, courts, schools, other hospitals, charitable and other organizations—an impressive demonstration of the need of such services in the community. Over 2,350 visits were made by the small force of social workers connected with the state hospitals to patients on parole under the care of the hospitals, and to persons in the community who of their own volition sought the advice and influence of the hospital in their difficulties.

Since that time, the demands upon the social service departments by the hospitals and the community have greatly increased. The scope of activity has been greatly widened. The day has come when the hospital that has failed to effect a medical reorganization on a social basis of this or similar kind, is regarded as backward and open to criticism. In Massachusetts, the question of the value of such service both to the hospital and to the public has been definitely settled. The danger zone of over-enthusiasm, when the plan was in its inception and when the gloss of novelty tempted injudicious exaggeration of expected results, has been safely passed. The department of social service in the state hospitals rests securely on a basis of merit by achievement.

The question of to-day concerns a fuller development and extension of the system. While the importance attached to this work registers a high level of public interest in social welfare, there are lacking as yet the means to meet adequately the demands and the opportunities for service. Much has been accomplished; a great deal remains to be done before the maximum of usefulness is attained.

There comes to mind the case of one institution, with an average daily population of 1,500 patients. It serves a district comprising an area of 744 square miles, with 55 cities and towns, and a large number of scattered, out-of-the-way hamlets and villages. One worker undertakes the duties of the department. Out-patient clinics are held monthly in six principal centers. From January, 1916, to January, 1917, a total of 647 persons presented themselves at these clinics. Three hundred and sixty-seven were former patients of the hospital. The remainder had had no previous relations with the hospital, but came for advice, or were referred for examination by outside agencies. Many public-spirited persons came to obtain fuller information regarding the aims of the clinic, and to inquire how they might co-operate and further the work in their own community. From such conferences many practical schemes have been worked out for relief and supervision. In one manufacturing city, nine of the leading shoe manufacturers, at the request of a local judge, met at the clinic and discussed plans for the employment of mentally handicapped persons in their district. A satisfactory arrangement was made whereby discharged patients needing employment could be placed at work. The incident is mentioned as one of many showing the effect of the mental hygiene movement in arousing a community sense of responsibility and obligation in these great problems which are not alone our problems but are indeed the community's problems. One can but lament the limitations under which the work must be carried on. Instead of one there should be, at the very least, four or five workers for a field of this size.

What may be accomplished with an adequate force of workers is shown in the following report of the Out-Patient Department of the Psychopathic Hospital, published here by courtesy of Miss Mary C. Jarrett, Chief of the Social Service Department. The table showing the "source of visits" is worthy of attentive study. The table showing the many times that the various charitable agencies have found it necessary in difficult cases to seek the advice of the clinic is eloquent witness of the need.

BOSTON PSYCHOPATHIC HOSPITAL
Out-Patient Department
October 1, 1915 to September 30, 1916

New Patients	*Male*	*Female*	
Adults	318	562	
Adolescent	94	110	
Children	238	151	
Infants	4	8	
	654	831	
Total			1,485

Sources of Visits		
Public agencies		
Courts	97	
Schools	69	
Other hospitals		
Physicians	155	
Social service departments	38	
Charity organizations		
Private	38	
Public	364	
Individuals		
Physicians	104	
Miscellaneous	40	
Own initiative	167	
Psychopathic hospital		
Wards	220	
Social service department	193	
Total		1,485

Reasons for First Visits

Question of insanity	94	
Question of mental defect	474	
Psychoneurosis	152	
Alcoholism	45	
Drug habit	7	
Speech defect	66	
Sex offence	41	
Juvenile delinquency	209	
After-Care		
Psychopathic hospital	220	
Other state hospitals	30	
All other cases	100	
Total		1,485

Number of new patients each month

1915		
October	113	
November	124	
December	111	
1916		
January	115	
February	128	
March	160	
April	143	
May	146	
June	137	
July	105	
August	93	
September	110	
Total		1,485

Number of visits each month

1915		
October	679	
November	740	
December	678	
1916		
January	715	
February	756	
March	796	
April	795	
May	938	
June	780	
July	757	
August	872	
September	755	
Total		9,261
Reports sent out in the year		298

The humanitarian side of this work merits recognition, but carried on as it is in a quiet, unostentatious way, it is little known to the public. From experience at the Danvers State Hospital (to which I refer from intimate knowledge of the facts), I feel justified in asserting that accomplishments in the way of relief and material benefits have given a new meaning to human relations and duties in places where formerly existed indifference and lack of appreciation of the responsibility and the need. It is a far cry from the old days of mysterious detachment and miserable suspicion, to find our forces engaged in such community work as arranging for the proper care of the tuberculous, the relief of poverty, the securing of employment, urging sanitation and public hygiene, insisting upon better living conditions, and the other innumerable phases of social welfare. The dread of the hospital, the mystery which bred distrust, the undercurrent of suspicion which hindered and hampered the work of the greatest of our public charities, are disappearing. Our aims, methods, problems and difficulties are better understood. Through service we have gained an unprejudiced trial and fair judgment in the court of public opinion. The community gains immeasurably through the co-ordination and higher efficiency made possible by harmony and mutual understanding between the public and its servants.

The services of this department make possible the release of a larger number of patients, thus reducing the state's burden of support. Even more important, it exercises a salutary influence in the upbuilding of character, resulting indirectly in a reduction of the number of claims upon charity. It lessens the tendency to habits of dependence in a class peculiarly prone to fall back upon the idea that the state owes them a living when once they have had experience of its liberality. Above all, the hospital's aftercare of discharged patients assures intelligent guidance and help, and reduces the possibility of relapses and readmissions. This protective and preventive function fulfils a most important part of society's responsibility towards those unfortunates whose infirmities are often the expression of a great material and spiritual misery. Does it help to prevent? It does. Under the supervision of these departments are persons to-day, leading lives of usefulness to themselves and others who not so long ago might have been supposed to be the helpless slaves of antecedent circumstances.

The influence of environment for good or evil assumes greater importance the more closely we follow the work of a well-organized Social Service Department. In our eagerness to correlate effects with the findings of pathological research, and in our scientific interest in the bundle of tissues and cells, we have all too frequently been inclined to lose sight of the human side of the problem and to forget that other bundle of desires, impulses, passions, impressions and reactions which forms the personality, and which obstinately refuses to accept a materialistic view of human suffering and human relations.

I know of one institution where for almost two years there has rarely been an instance of readmission of an alcoholic patient whom it was possible to keep under the supervision of the out-patient service. An exceptional institution, you will say, as a matter of course. From experience I am convinced that the record would have been otherwise were it not for an active social service that, through its workers and its clinics in various towns, follows the patient to his home and social environment, and exercises the authority and influence of the hospital over those whose care and welfare it has assumed. Special mention is made of this because it concerns a class generally rejected and derided in the community, and one often exposed to environmental influences allowing of no occasion for deliberation upon conduct, or scope for individual moral judgment or choice in the face of temptation. This is real service.

The effect of the activity of these earnest, skilled workers in any community has a very practical value in the development of intelligent public opinion. It is educational in the best sense. It reacts on the life and character of each community, and becomes instrumental not only in disseminating knowledge, but in the development of the community conscience. Modest as were the beginnings of this movement and often inadequate the means, no one can doubt its capabilities of becoming a powerful factor in shaping and giving direction to the mass of influences which sooner or later will result in deliberate measures to control the root-causes of those mental disorders which spell racial degeneration. Its significance and potentialities are well expressed in words used originally in another connection but equally applicable here: "Practically all of the public questions crowding for solution to-day are thus crowding because of the culmination of the various educational forces that have been at work throughout the civilized world during the last half-century."

SUBSIDIZING MENTAL DEFICIENCY—THE "PAUPER IDIOT ACT" OF KENTUCKY

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THE earliest concern of English law with the feebleminded and insane was with their estates. In feudal times it was the practice of the overlord to use the estate of an idiot first, for the support of the idiot and his family and the remainder for his own use, in lieu of the military service the idiot was unable to render. Abuses of this practice led in 1342, the seventeenth year of Edward II, to the *De Prerogativa Regis*, which gave into the king's hands the administration of the property of mentally incompetent persons. Chapter XI of this act as given in English by Wharton and Stille, "Medical Jurisprudence," reads, "The King shall have the custody of the lands of natural fools (*fatuus naturalis*), taking the profits of them, without waste or destruction, and shall find them their necessaries, of whose fee soever the lands be holden." The next chapter of the same act provides for the administration of estates of insane persons (*non compos mentis*) and recognizes them as sick and therefore recoverable. These administrations fell to courts in chancery, who commonly appointed two committees, one to look after the estate, the other to look after the person. The one appointed to look after the estate was often spoken of as "buying a fool."

Virginia, to which the territory of Kentucky belonged and from which the state was formed, took early cognizance of the fact that insanity is a sickness and often recoverable. Virginia established the first state hospital for the insane on this side of the Atlantic at Williamsburg in 1773. The state then made statutory provision for the "restraint, maintenance, and cure of persons not sound in mind." A Virginia statute of 1785 makes provision for the preservation of the estates of "Ideots and Lunatics."

When therefore the commonwealth of Kentucky began an independent existence June 1, 1791, her people had the well established precedent of English law and Virginia law in caring for both the estates and the persons of idiots and lunatics through committees.

In 1793, the third year of the commonwealth, an act was passed providing for the *support* as well as the safe keeping and restraint of persons of unsound mind, and that such support should be paid from the state treasury if such persons were without estate. This appears to be the original Pauper Idiot Act, as it is commonly designated to-day. The text, as found on page 190 of Vol. I of Wm. Littells's "Statute Law of Kentucky," Frankfort, 1809, is as follows:

"SEC. 1. *Be it enacted by the general assembly,* That if any person be of unsound mind, it shall be the duty of the attorney general, or of the attorney for the state, or the county, as the case may be, upon being informed thereof, to make application to any court of chancery within this commonwealth, to appoint a committee to such unsound person; and the court of chancery to whom application shall be made, shall in the manner heretofore prescribed, make inquiry into the fact, and make such order respecting the support, restraint and safe keeping of any such person who shall be so found to be of unsound mind, as to them shall seem just and proper. Wherever the estate of such unsound person, shall be sufficient for the support of his family (if any he have) and himself, the said person shall be supported out of such estate. But where the court shall be of opinion that the estate of such unsound person is insufficient to the support of such unsound person's family (if any he have) and of himself; or of himself if he have no such family, the said court shall have power to make an order that such sum shall be paid to the committee of such unsound person, out of the public treasury, as to them shall seem just and reasonable, and the auditor on the receipt of a copy of such order, shall debit the same, and give an order for the amount on the treasurer, who is hereby directed to pay the same; and the said court shall have power to take such security of the committee as they shall think fit and also to call upon the said committee for an account as often as they think right.

"SEC. 2. This act shall commence and be in force from and after the passage thereof.

"[Approved December 19, 1793]"

In 1804 this law was amended to allow the payment of funeral expenses from the state treasury for such persons of unsound mind and without estate, to an amount not to exceed ten dollars.

No further modifications of this statute were made until 1822 when statutory provision was made for taking under state control a private asylum for lunatics at Lexington. This institution had been incorporated in 1816 as the "Fayette Hospital" by fifty-five contributors. The corner stone, laid June 30, 1817, was inscribed

"The first erected west of the Appalachian Mountains." The establishment of a state asylum in 1822 marked the founding of the second state hospital for the insane in the United States. Each of these establishments (Fayette Hospital 1816, and the State Lunatic Asylum 1822) constitutes a notable indication of the advanced state of public opinion in regard to the nature of mental unsoundness and the sort of social service needed by idiots and lunatics.

It was provided in the statute of December 7, 1822, that the commissioners should notify the governor when the buildings were ready for the lunatics; that the governor should then issue a proclamation giving notice to all committees of lunatics; that, after a date named in the proclamation, "the whole of the laws in force in the state providing for the care and maintenance and safe keeping of persons of unsound mind shall cease."

This was evidently intended to stop all drains upon the state treasury for the maintenance through committees of both lunatics and idiots. Probably the law had already been abused, and the proposal was to place all such cases in the hospital. The first patient received at Lexington was an idiot mulatto girl of twenty-one who never walked, talked, or ate solid food.

But some influence, and this was probably that of the interests that had found the administration of the pauper idiot act personally profitable, changed the purpose of the general assembly very quickly. Four days later (December 11, 1822) they passed another act, providing that when a circuit court is satisfied a lunatic or idiot is *harmless* and can be *safely* and *properly* kept by parents or near relation, and is without estate, the court may appoint a committee and make an allowance as formerly. So the Pauper Idiot Act went on after a four-day repeal. The state again committed itself to the policy of maintaining indigent feebleminded persons in their own homes, while the actually insane were declared the proper patients for the lunatic asylum.

An Act of January 10, 1825, denominates for the first time the amount to be paid from the state treasury to the committee of each pauper idiot. Hitherto the amount in each case seems to have been determined by the circuit court having jurisdiction. The state law in 1825 set the uniform amount of fifty dollars ($50) per annum, as this sum, it had been found, could maintain a patient for a year in the lunatic asylum. This act was repealed. It was revived again January 24, 1827.

These frequent changes indicate the abuse of the law, and also the tenacity of those who profited by its administration. The preamble to an Act of December 13, 1831, recites that by "an undue and illegal execution of the existing laws in relation to lunatics and idiots, many persons who are not idiots are supported out of the public treasury." This act is a long one, setting forth rigid rules of court procedure for the support of idiots both with and without estate. It provides for diagnosis by a jury as between insanity and feeblemindedness, the jury reporting in writing to the sheriff and the sheriff to the circuit court. The court issues orders. The clerk of the court has to prepare for each session a list of idiots and lunatics with the committees of each.

In 1840, it was provided that all inquisitions of idiocy and lunacy be made in open court, and that the idiot or lunatic should be "brought into court for the inspection and examination of the jurors." By this act the certificate of the court was required before the auditor could pay the committee, and the attorney for the commonwealth was given power to summon the committee of an idiot to show cause why the allowance should not cease.

A statute of 1852 required that in 1855 and every fifth year thereafter the idiot should be brought into court and tried by a jury, and a writ found before the allowance should be continued. This precaution indicates the probable abuse of committees drawing allowances for idiots who were deceased.

Some years ago the annual allowance was raised to seventy-five dollars ($75). Within the last ten years the experiment was tried of placing one-third of the amount upon the county, in order that local control should be made more rigid, as well as to lessen the drain upon the state treasury. But this regulation lasted only until the next meeting of the general assembly.

The state treasury last year paid out more than one hundred and sixty-five thousand dollars to some twenty-two hundred so-called pauper idiots.

This history of the Pauper Idiot Act in Kentucky is the history of a well-meaning and philanthropic plan to deal with mental defectives. Its administration, however, has always been attended with gross abuses, allowing of petty raids upon the state treasury, with each and all of the hedges that it has been possible to erect around it.

It would have been a most fortunate situation for the state if the repeal in 1822 had been allowed to stand. This would have saved the state a few million dollars, the feebleminded would have been just as comfortable and happy, and the pressure to take proper care of them would have been greater, so that means would have been found before this to prevent them multiplying so rapidly, and there would now be fewer defectives in the state to care for. The administration of this law had been a potent factor in nursing the feebleminded so there are doubtless many more of them than there would have been without it.

The law is now the most glaring anachronism in legislation and administration relative to the feebleminded existing in the United States. It is a striking survival of the centuries-old English custom of "buying a fool." We now know the importance not only of training the feebleminded to be as useful and happy as possible, as Seguin taught, but also of taking such care of them that they shall not produce feebleminded children. This statute puts a premium upon having feebleminded children, and by pensioning them in turn favors further multiplication.

THE CARE AND TREATMENT OF THE INSANE IN THE COUNTY INSTITUTIONS OF PENNSYLVANIA*

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THE problem of the care and treatment of the insane is one of vital importance to the welfare of the public. In view of the ever-increasing population of the institutions for the insane, every effort must be made not only to establish methods of economical care but also to promote possible restoration and prophylaxis. In Pennsylvania some fifty per cent of the insane are confined in county institutions, and no consideration of the problem in this state can be complete without a study of the care and treatment afforded by these institutions.

With the purpose of ascertaining the present status of the insane in county institutions, this study, made possible by the National Committee for Mental Hygiene, was undertaken at the request and under the auspices of the Public Charities Association of Pennsylvania. In gathering the facts which form the basis of this report, each institution was personally inspected and those in authority questioned, the constant endeavor being to obtain an accurate and unbiased view of the local situation.

Much assistance was obtained from the extensive and detailed report of Dr. C. Floyd Haviland, the information from which was utilized as a basis for comparison with present conditions. Due consideration has been given to any changes or improvements which have been made since Dr. Haviland's report. Grateful acknowledgment must also be made to Dr. Frank Woodbury, Secretary of the Committee on Lunacy of the State Board of Public Charities of Pennsylvania, whose courtesy facilitated greatly the work of visiting the institutions.

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*In 1914 Dr. C. Floyd Haviland of the Kings Park (N. Y.) State Hospital made a survey of the institutions caring for the insane in Pennsylvania for the Mental Hygiene Committee of the Public Charities Association of Pennsylvania. He examined carefully each of the state institutions and county asylums and gave in detail in his report (publication No. 15 of the Public Charities Association of Pennsylvania) the actual conditions in these institutions together with an outline of a constructive plan for state care. The conditions found by Dr. Haviland revealed an amazing neglect of the welfare of the insane on the part of this great state. He found the insane cared for in county asylums under the most distressing conditions and the state system of hospitals conducted in an inefficient way which prevented them from performing their proper function. On the basis of Dr. Haviland's report an effort was made to secure the legislation necessary for abandoning county care and replacing it with a system of state care conducted upon a high plane of humanity and efficiency. This effort failed. In 1916 the Public Charities Association, desiring to know what improvements may have been made since Dr. Haviland's report, requested the National Committee for Mental Hygiene to make another survey of the county asylums. The National Committee for Mental Hygiene selected for this purpose Dr. William C. Sandy, Medical Director of the State Hospital for the Insane at Columbia, South Carolina. The article here published is a summary of Dr. Sandy's report. An effort is again being made this year to secure legislation that will make possible complete state care.

The most accepted methods of treatment of the insane are the result of long years of experience and study by those engaged in this work. There are established principles of treatment requiring certain facilities and methods which are to be found in well-conducted modern hospitals. Before entering into a discussion of the present status of the treatment and care of the insane in the county institutions, it will be well to outline briefly some of the requirements of a modern hospital.

In the first place, there must be properly designed and equipped buildings insuring enough day and night space, sufficient sanitary toilet and bathing facilities, adequate fire protection, heating, water and light facilities, a sewage disposal plant, culinary and service departments and so forth, with a modern business system of administration.

In the buildings, wards or units must be sufficient in number to make possible the proper separation of the different classes of the insane, with special facilities where needed, provision being made for the reception of new patients, the isolation of the tuberculous, the infirm and sick, the noisy, violent, destructive and untidy, the working, clean and chronic, and the convalescent.

A medical superintendent is required, one who is experienced in the diagnosis, treatment and care of the insane, and who has executive ability.

There should also be a sufficient medical staff to insure individual attention to the patients.

Frequent staff conferences should be held, presided over by the superintendent or some other competent physician, at which all patients may receive consideration as to diagnosis, treatment and other matters of importance.

A systematic and thorough examination, mental and physical, of each patient should be made and complete records kept, insuring an adequate consideration of the mental and physical condition when the patient is presented at the staff conference. This also results in a minimum of risk of unjust or unwarranted commitment, the ascertainment of indications for treatment and, of considerable importance to the general public, the preparation and accumulation of medical data of future value.

There should be a well-equipped laboratory with a trained pathologist, without which facilities many patients would be overlooked who might be benefitted by active treatment.

Equipment is needed for hydrotherapy, electrotherapy, dentistry, general and special surgery, and special examinations, such as that of the eye.

In order to carry out with any degree of success a system of treatment, a sufficient number of nurses and attendants must be provided. There should be a good training school for nurses, and employees of the attendant class should be given lectures to insure a proper conception of their duties. Competent supervisors are required for the immediate oversight of the nurses and attendants.

One or more full time instructors in diversional occupation are required. Occupation, where properly applied, not only retards mental deterioration in many cases but also frequently hastens recovery and serves to prepare the patient for a return to his normal environment. There should be sufficient land to afford outdoor occupation in the form of farm and garden work.

Recreation also is an effective means of arousing the interest and of combating the tendency to dementia. No community is doing justice to the insane in its care without providing some form of amusement in the shape of dances, moving pictures or entertainments of a like nature.

A most important phase of the care and treatment of the insane, not only to the individual patient but also to the public at large, is the prevention and after-care work. To carry on this activity, a field or social worker is required, whose duty it is to visit and advise paroled patients, and assist them in getting work, investigate home surroundings and endeavor to devise arrangements so that patients otherwise suitable may be paroled, ascertain facts from the relatives that may be needed in determining the diagnosis and course of treatment to be instituted in obscure cases, and such other information as may be required by the medical staff.

Besides the above community work, the hospital owes a larger duty to the public, and clinics conducted by members of the medical staff should be established in the interests of prevention, at which those desiring it may receive early advice.

Bearing in mind these features of a modern hospital for the insane, which may be regarded in many respects as the minimum requirement for thorough scientific examination, care and treatment, we are prepared for a review of the results of the survey of the county institutions for the insane in Pennsylvania.

In extremely few instances can the physical conditions be considered at all satisfactory. Located as most of the buildings are, in close proximity to almshouses, often in the rear of or merely extensions of the latter, the architecture of the buildings has necessarily been affected, and usually no thought apparently was entertained in formulating the plans that the sick were to be accommodated. The approach to the most elaborately built institution is by means of a lane through the midst of the almshouse out-buildings, including the hennery and the piggery. There is a marked contrast between the best and the poorest buildings and equipment. In the former there are evidences of ill-judged expenditures and wasteful extravagance, as for example needlessly ornate features such as stained glass windows, lavish use of gold-leaf and marble; also in the case of an institution located in a particularly healthful locality, in the providing of a costly, unused and unneeded air purifying apparatus. In the examples of poorest equipment, where there is a painful lack of sufficient sanitary and comfort arrangements, this has seemed to be due both to a want of appreciation of the requirements of the situation and to a false sense of economy. The latter has also been explained as due to the uncertainties of politics and the desire on the part of the Poor Directors to "make a good showing" so as to be retained in office.

Most of the county institutions are characterized by an insufficient number of wards, making it impossible to separate properly the different classes of patients and affording no chance for the special provisions which are so necessary for successful treatment of the insane. Only in the largest institutions is there any approach to a desirable number of wards. Probably the greatest single improvement during the past two years in the institutions under consideration is a group of new buildings recently occupied, which afford a municipal hospital much more extended opportunities for classification.

The matter of fire protection in most cases seems to have been given little or no careful attention. A few of the institutions have buildings of a more or less fireproof construction, and in such it is generally regarded as sufficient protection. It is well-known, however, that so-called fireproof construction is usually only a relative term, and the installation of modern fire-fighting apparatus should never be neglected. A majority of the institutions have inadequate fire protection. In some instances where service pipes and hose are provided there is an insufficient supply of water with poor pressure. In other instances, the hose is difficult of attachment, is reeled in a tangled or disorderly manner, or is located at too great a distance in the almshouse to be of service on the insane wards. Fire extinguishers are sometimes provided, but have been found in some cases in a neglected condition, in one case not having been inspected or recharged in four years. This was in an institution where the fire risk is particularly great, as the furnace is located in the basement of the part of the building which is constructed of wood. Two floors are occupied by insane who are locked in their rooms at night with no attendants. There are only inside, wooden stairways and no fire escapes or hose equipment. In another institution there is a basement dormitory in which seven insane men sleep, the only exit being a narrow, wooden, winding stairway, with no easily accessible means of fighting a fire. With a single exception, no fire drills are ever held and it is rare to find that the apparatus is ever tested. Other conditions found, increasing otherwise poor fire risks, were unprotected natural gas flames in constant reach of insane men, kerosene oil stored in dark closets with clothing or trash, and a crude drying room in a basement, containing a hot stove with clothes hung in dangerous proximity about it. One institution has within two years systematized the fire protection by the organization of a fire company of employees with regular drills, while another, in which fire protection has recently been greatly improved by increased water supply and much larger reservoirs, has plans for drills as soon as the fire escapes are enclosed so as to render them safe for patients' use.

The amount of heat in the buildings generally seemed sufficient and the method of heating appeared satisfactory.

Notwithstanding the fact that it is contrary to the recommendations of the Committee on Lunacy, a number of institutions were found where the radiators and hot pipes were either all or partially unscreened. Such a condition should not exist, as it is well-known that in certain states of mental and nervous deterioration the sensations are so blunted as to cause a loss of the self-protective reflex, such patients being liable to severe burns without being conscious of them. Other patients need the protection afforded young children and should be guarded against falls on or close contact with the hot pipes.

The necessity for a proper supply of water would seem to be self evident. Not only should the water be pure and free from contamination or possible source of disease, such as typhoid fever, but the quantity supplied should be large enough and the pressure sufficient for the purpose of fire-protection and for other uses such as hydrotherapy. In a number of institutions the amount of water available is much too small and the pressure too low for fire protection purposes, as already mentioned. In at least one institution, the matter has been repeatedly brought to the attention of the Poor Directors by the superintendent with no success, a political desire to keep down expenses being the stumbling block. Several springs are used, the safety of which is doubtful, as there is considerable risk of surface contamination and resultant disease, the springs being located comparatively near out-buildings and on a lower level. The water should be subjected to frequent examination by a competent laboratory worker, a precaution seldom taken.

A marked contrast is also found in the bathing facilities in the various institutions. A single bathtub in a dark, poorly ventilated room for twenty or more patients, a condition often found, cannot be considered adequate. It is a regrettable but actual fact that this may mean that many patients are bathed by careless or ignorant attendants without changing the water. The only safe and sanitary method is by showers, each patient then being assured a clean bath and a large number being easily bathed in a short time. Tubs are required, for special cases such as some of the infirm, but shower baths are practicable for a majority of patients, both men and women. Insufficient wash basins are provided in a number of institutions. In a still larger number the hot water faucets are not fitted with safety devices, it being possible for patients to have access to unlimited amounts of hot water, the bad features of which are obvious. As a rule, the only real protection against burns by hot water is to have the faucets turned on and off by means of a key kept in the possession of an attendant, although theoretically the plan adopted by one institution, of having a thermostatic attachment to the hot water system, is good.

The sewage in many instances still flows untreated into neighboring streams, although contrary to state health regulations, being a menace to the health not only of the inmates, especially where the water supply is from nearby springs, but also to that of the general public. Some of the institutions have finally complied with repeated orders of the state officials by building modern disposal plants.

A majority of the institutions have modern and fairly satisfactory systems of electric lighting. In a number, however, the wiring is exposed, and in still others dependence is placed upon natural gas, both increasing to a considerable degree the risk of fire.

Usually the only method of ventilation is by windows and doors, which is frequently unsatisfactory. Only a few institutions have systems of forced ventilation. It is in one of the latter that an expensive and elaborate air-washing apparatus has been installed, unused, unnecessary and incidentally out of order, the location being where the air is unusually pure and uncontaminated.

As intimated in the beginning of this report, the close association between the insane department and the almshouse is unfavorable to the former. This is never more true than in regard to the quality, quantity and method of service of food. In the general analysis* at the end of the report will be found in the subheads under "food," the words "good" or "fairly good." This refers to the quantity and quality, judging from an almshouse standard. It is customary, however, to furnish almshouse inmates with a dietary the principal feature of which is the low cost. This means monotony and often doubtful quality and quantity. As the insane must be regarded as sick and as many cases require special diet to insure possible improvement or recovery, variety often being essential in cases manifesting a disinclination to eat, the evils of a monotonous almshouse diet of perhaps poor nutritive value must be acknowledged. At the same time, it must be admitted that the food at many of the meals inspected appeared to be well cooked and of sufficient quantity, served in a fairly satisfactory way considering the meagre facilities available. In many cases, the authorities appeared to take commendable pride in the quality and quantity of food served and in the departments connected with the preparation of it. Some of the larger institutions have special diet facilities and make a desirable distinction between the insane and the paupers.

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*The chart showing in detail the conditions in each institution will be published with the reprints of this article.

As a general proposition, institutions whose object it is to care for and treat the sick are best conducted by those who have had medical training. In the county institutions, however, it is quite the rule for the insane to be intrusted to the care of laymen, in most instances entirely without previous experience. They are practically political appointees, subject to the whims of changing administrations of Poor Directors. Illustrating the evils of such a system is one county in particular, where the present almshouse steward had been out of office the previous year but in office the year before that, and had no idea whether or not he would be re-appointed at the end of his present term. Needless to say, the institution showed to a marked degree the bad effects of such political activity and frequent changes of administration. On the other hand, there are counties that retain for years the same officers, allowing a progressive policy to be carried out if such is desired, with resultant benefit to all concerned.

In most of the institutions that have laymen in charge—the almshouse steward or superintendent—the medical attention is meagre and only of the most superficial character. As a rule, the physicians are busy general practitioners who have had no special training, interest or experience in mental disease, and who pay brief calls to the institutions from one to three times a week. Even then the physicians often do not see all the patients but merely those who, in the opinion of the lay steward, are in need of medical attention. As a rule when a patient is seen, it is commonly only for minor physical ills and not for any consideration of the mental condition, however urgent the latter may be.

Some of the larger institutions have resident physicians, competent and experienced men, capable of doing good work. The proportion of physicians to patients, however, is too small, as will be seen in a glance at the appended analysis, the disproportion being still greater than there shown, as it must be remembered that the same physicians have the care of the almshouse inmates, often as many as or even greater in number than the insane.

As a consequence of there being too few physicians it has been impossible, even in the larger institutions with a resident staff, to make thorough mental and physical examinations or records sufficiently complete and systematic to be of future scientific value. Several institutions are, relatively speaking, doing good work, and making conscientious efforts to approximate what is considered satisfactory and scientific methods of examination and treatment. Some of these institutions contemplate additions to the present staff, which, if made will undoubtedly result in still further improvement in the medical work.

In the matter of statistical records, especially in respect to diagnosis and number of patients discharged as recovered, the inexperience in mental disease of a majority of the physicians engaged in county care vitiates any attempt at accurate conclusions.

Little can be said in commendation of the medical work in those institutions supplied with non-resident or inexperienced physicians or where there is no attempt made at mental examination. As an illustration of the evils resulting from such a system may be cited the case of a foreigner, related by one of the superintendents. There had been a change in the administration, and a new physician, for some thirty years a general practitioner, had been in office for a few months. One day a woman unable to speak English visited the institution, saying that her husband was an inmate and that she had come to take him home or to stay herself, as she could no longer get along outside without his help. The superintendent, then only recently appointed, sent for the patient and found that he had been admitted some six months before. At no time had he given any trouble or the slightest indication of mental abnormality, according to the attendants, having been an orderly and efficient worker almost from the day of his arrival. Through an interpreter it was learned that the patient talked in a rational manner. He had not realized where he was, in fact thought he was serving time in a penal institution for some offense of which he had no recollection, and that when his time was up he would be allowed his freedom. Arrangements were made forthwith for his discharge and he soon left with his wife, and resumed his former mode of living. Such an example of unjust confinement could not and would not have occurred had this man been sent to a modern hospital, received a thorough mental and physical examination, the circumstances of his commitment investigated, if necessary, by the social worker, and the complete findings, with the patient himself, considered by a competent staff in conference.

Most of the institutions are without even primitive facilities for laboratory tests, so necessary as aids in diagnosis, not only for mental disease but also for ordinary physical ailments. One of the largest and best equipped institutions is compelled to send away most of its material to be examined, and in consequence thereof very little work of that nature is being done. Although ambitious plans, including a modern laboratory, are being contemplated by the superintendent of that institution, there is no immediate prospect of their being realized in the near future. In but two institutions is there sufficient equipment for full laboratory diagnosis.

As stated in an early part of this report, the few wards usually found preclude proper classification or special provisions so important in the treatment of the insane. New patients and those who may be convalescent, feeble or of the quiet and tranquil type, are quite generally subjected to the annoyance of and undesirable association with the violent, destructive, noisy and untidy. Such a state of affairs often means diminution of the chances for recovery or prolongation of the mental condition and consequent increased length of confinement, and is also attended with an ever present danger of acts of violence inflicted by the disturbed on those with whom they are so closely associated. There is little provision made for the isolation of the tuberculous, these patients generally mingling freely with the others and subjecting them to the chance of infection.

Facilities for hydrotherapy are generally unprovided. By hydrotherapy is meant treatment by means of the continuous bath, the various forms of wet pack and special baths, such as the needle, rain, shower, the different douches and the like. The lack of means for the application of hydrotherapy (associated also with an insufficient number of attendants, too few wards for the proper separation of the disturbed, and faulty methods of treatment) account to a great degree for the practice of restraint and seclusion, which no longer are countenanced in the best modern hospitals except in extreme cases.

Only a few of the institutions are furnished with dental equipment, facilities for general surgery and electrical apparatus for diagnosis and treatment. Very little general surgery is done. By far most of the institutions are entirely unprepared for surgical work, and should an emergency case occur, nothing could be done unless the patient could be transported a number of miles to the nearest general hospital.

Too few attendants are provided in practically all of the institutions. In only a few can there be said to be nurses employed, meaning those under training in or graduates of a training school. Most of those caring for the insane are inexperienced and have been in their present occupation only a short time. The plan in six of the smaller institutions of not having any night attendants cannot be condemned too strongly. In one institution there is the doubtful practice of having the male night watchman make regular rounds through the female department. In some of the smaller institutions, having only two attendants, a man and a woman, patients are frequently left alone for several hours at a time, the man having other duties such as running the laundry machinery or outside work, the woman being occupied in the kitchen or almshouse department. In justice to some of the institutions it must be said that part of the lack of attendants is due to the inability to secure persons to fill the vacancies. The number of these vacancies, however, is not large enough to change materially the proportions as stated.

In only four of the institutions under consideration are there training schools for nurses. Only one of these can be said to be thorough, for according to the statement of the superintendents, the attendance in two is not compulsory and in the third there is "poor co-operation."

The importance of occupation in the treatment of the insane has already been mentioned. A variable number, usually a fair proportion of the patients, is reported as doing some kind of work. It is the so-called "unwilling worker," however, for whom diversional occupation is especially valuable as a means of treatment. This requires a special instructor, some one to devote her entire time in an endeavor to arouse the interest of selected patients. Only three of the institutions are supplied with such a teacher. There is a sight no more pitiable than a ward full of patients sitting about in a forlorn manner, with nothing to do, the quarters often crowded, poorly lighted and ventilated, almost bare of furnishings, and the only seating facilities perhaps being backless benches.

Only one institution is at present providing after-care. One other institution now has two of its nursing staff attend courses in social service work, with the idea of putting in operation at some future time a form of after-care. So far none of the counties has instituted any plan looking toward prevention.

In conclusion, one is impressed with the total lack of standardization of both equipment and methods. Some few of the county institutions show the results of extravagant and ill-advised expenditures in buildings, needlessly elaborate equipment and ornate fittings, while the majority are painfully contrasted by the lack of sufficient necessities of equipment as fire protection, toilet and bathing facilities, provisions for examination, treatment, classification, occupation, recreation, and the like.

Most county institutions are insufficiently provided with medical attendance, all except a few depending upon non-resident and inexperienced physicians, usually political appointees, making infrequent visits to the institutions and only in a cursory way looking after physical ills. Facilities for scientific examination and the compilation of records are almost entirely lacking, the latter when present being incomplete and usually of no value.

The majority of the county institutions are under lay supervision, that of the almshouse superintendent or steward, a political appointee, whose retention in office is subject to the whims of Poor Directors.

There is a general lack of sufficient attendants, and those provided are commonly untrained.

As a result of these conditions, the care is largely custodial. There are usually no facilities for treatment and treatment is not attempted.

ABSTRACTS

THE TYPE OF FEEBLEMINDED WHO CAN BE CARED FOR IN THE COMMUNITY
George L. Wallace, M.D., Superintendent, Wrentham (Mass.) State School
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MENTAL STATUS OF RURAL SCHOOL CHILDREN
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THE MENTAL STATUS OF RURAL SCHOOL CHILDREN OF PORTER COUNTY, INDIANA
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American Journal of Insanity, Vol. 73, No. 3, January 1917.

THE TYPE OF FEEBLEMINDED WHO CAN BE CARED FOR IN THE COMMUNITY

". . . With the large number of feeble-minded in this state, it cannot be considered a practical solution of the problem, however, to segregate all of them in institutions. In fact, such a course, if it were practical from a financial standpoint, would be neither necessary nor desirable. The institution, important as it is, must be considered but a factor in the solution of this problem.

"There are large numbers of the feeble-minded in the community and there always will be large numbers in the community, even after most liberal provision is made. Therefore, it seems that the most practical thing to do is to make still more liberal provision for them and aim at a better understanding of how to care safely for the feeble-minded in the community.

"In considering what class of feeble-minded individuals may safely remain in the community, it is of more importance to study what communities are safe for the feeble-minded. Most communities have certain conditions that make them unsafe for any unsupervised feeble-minded person. Much more depends on the community than on the individual. All feeble-minded persons depend on others for either their proper or improper social reactions. No feeble-minded person has good judgment or can properly adjust himself to his environment. He is dependent on others to order properly his course for him. The majority of the feeble-minded are not vicious but are simply drifters—easily influenced for good or evil. It is, therefore, impossible to pick out a feeble-minded person and say that he will do well in a community for his reactions will depend upon the influence to which he is subjected and the only safe prediction that can be made for his welfare must be based upon knowledge that he will receive proper supervision.

"Without special training the feeble-minded person cannot learn to perform the ordinary duties that the normal child naturally picks up and, for this reason, we find in the community large numbers of feeble-minded persons who cannot perform satisfactorily the simplest activities. After he has tried this job and that, only to find that he is a failure, is it a wonder that he becomes a serious social problem? How many normal people could continue to react normally in the community if they were robbed of the great opportunity of industry?

"With the spread of knowledge of the feeble-minded problem, there has been a great demand for increased provision by the school systems for special classes. These classes are becoming powerful factors in the solution of this problem. The teachers for these classes are selected for superior ability. Their remuneration is greater than that of teachers of the ordinary grades, thus giving permanency to their work, making it possible for a teacher to have the same group of children under observation for a period of years. These classes, all under the general supervision of a trained supervisor, and under medical supervision that is provided, make a most excellent organization for caring for the defective children in the community. They are giving these children the advantage of an education such as is provided in an institution with the advantage also of receiving home care. They are also extending their activities, in some degree, beyond the school by assisting these boys and girls in securing positions and, in some cases, carrying supervision to them in their work. These classes also provide a splendid opportunity for the study of the social reactions of these children in the community, a side of the work that it is impossible for the institution to perform. The supervisor of these classes thus has the opportunity to arrive at a fair conclusion as to what children should have institutional care and what children have fair chances for leading harmless and, possibly, useful lives in the community.

"With the extension of this movement for special classes, until every school system of any size has a sufficient number to accommodate all children with mental defect, it would seem that the larger number of children with ordinary mental defect could be safely protected and educated in the community. It is, however, with the advent of mature life, that the more difficult problems of dealing with the feeble-minded in the community arise. The adult feeble-minded are more difficult to control than the children, due to the more complex social relations into which they are thrown, but chiefly to the failure of the community to disassociate age and responsibility and make proper provision for the supervision of the irresponsible.

"This state has already taken a census of its feeble-minded. Would it not be desirable for the Commission on Mental Diseases to keep a permanent registry of all the feeble-minded in the state and work out a system whereby it can place them all under intelligent, co-ordinating supervision? It would be necessary to have a corps of trained workers selected, preferably from institutional employees and teachers of the special classes, a group of workers who have lived with, worked with, and who know the feeble-minded. These workers could follow defective children leaving the special classes and give them a kindly oversight and supervision that will largely insure against their becoming harmful agents in the community. The feeble-minded most in need of institutional care could better be determined. The institutions could also perform a larger service by co-ordinating with the community in the way of admitting those most in need of institutional care and placing out in the community many trained cases, were it possible to place them under the supervision of trained workers—those who know the danger signals of the feeble-minded and have authority to remand to the institutions.

"At the present time we are touching the problem only in spots. We are training and caring for the children in the special classes to a certain age and then turning them out into the community—large numbers to become social problems because they have no longer intelligent supervision. There are already hundreds of social problems of the feeble-minded who need institutional care but for whom there is no provision. There is no doubt that many of these problems could be prevented if there were room in the institutions where some of the children leaving the special classes could be placed for a time and thus complement the work of the special classes by tiding these children over, perhaps, an especially critical period in their lives; and while doing this, teaching them a useful occupation and placing them later in the community and still carrying to them the supervision they need." . . .

"The feeble-minded problem, although closely associated with the various social problems that the organized societies are dealing with, is still a distinct and separate problem that can be best handled by those who are trained with the feeble-minded. . . .

"It would be quite possible to indicate classes of the feeble-minded that we think would safely get along in the community, such as young children, the lower grade cases if provided with physical comfort and care, the male, perhaps, more safely than the female, the girl who is not the possessor of physical beauty, the child who has a good home and others, but this would all be but a guess on individual cases.

"In closing I can only say that the number of feeble-minded that can safely be cared for in the community, is in direct ratio to the supervision that the community is willing to provide and I believe this could be most easily effected through the extension of the authority and activities of our Commission on Mental Diseases."

MENTAL STATUS OF RURAL SCHOOL CHILDREN

At the request of the Delaware State Board of Health, State Board of Education, and Co-operative Educational Association, the United States Public Health Service undertook a sanitary survey of the rural schools of New Castle County, including the mental status of the school children. This survey was made by Doctor E. H. Mullan. Doctor Mullan's conclusions are as follows:

"1. Mental deficiency cannot be diagnosed by means of the Binet scale alone. This is shown in Tables I and IV, where it may be observed that some children who measure 9 and 10 years by the Binet scale are considered normal, while other children of the same chronological age, who measure 10 and 11 years mentally by the Binet scale, are considered mentally defective.*

"2. The Binet tests are an excellent means for finding out the various mental abilities of an individual. During the application of these tests much light is thrown upon the subject's general fund of information, and an opportunity is afforded to observe the quickness and the character of mental operations, emotional states, and abnormal mental symptoms.

"3. The employment of selected tests is a rapid and effective method of differentiating subnormal children in schools for purpose of diagnosis.

"4. Normal children 8 years of age and over should perform four movements out of six movements with the four-cube test.

"5. Normal white children 12 years of age and over should perform two out of four movements with the five-cube test.

"6. Normal children between the ages of 7 and 11 years should be able to repeat six digits.

"7. Five-tenths of 1 per cent of 3,793 rural school children examined in New Castle County are definitely feeble-minded and in need of institutional treatment.

"8. An additional 1.3 per cent of the total number were so retarded mentally as to be considered probable mental defectives and in need of institutional care.

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* The writer personally believes that the term Binet-score should be substituted for the term Binet-age and that "12 points," instead of Binet-age of 12, should be considered the maximum score.

"9. A number of mentally defective children were encountered who exhibited symptoms similar to those which are observed in the adult insane.

"10. It is believed, as a result of this survey, that epilepsy is a more prevalent disease than it has heretofore been thought to be.

"11. The defective school children encountered in the schools of New Castle County hamper school work just as in other places. In some instances they are a real source of danger to other pupils, and many of them are in school because there is no place to put them.

"12. It can not be too strongly recommended that the State of Delaware provide a home for the feeble-minded and other defective individuals who are without proper guardianship where they may be segregated and taught under proper supervision to be self-supporting.

"13. It is furthermore strongly recommended that proper measures be taken for the formation of special classes to supply needful training to retarded children in the schools of the state."

THE MENTAL STATUS OF RURAL SCHOOL CHILDREN OF PORTER COUNTY, INDIANA

In the course of this survey [Dr. Taliaferro Clark] a study was made of the mental condition of each child. The purpose was not only to determine the number of mental defectives who require special or individual treatment, but to study the influence of school surroundings on mental status. Coincidently, studies were made to determine the value of the Binet-Simon tests for grading intelligence.

A total of 2,185 children was thus examined, special reliance being placed in the Binet tests with some modifications. In the case of exceptionally retarded children revealed by these tests, however, special methods were employed to determine the degree of mental impairment. Dr. Clark summarizes the results of the survey as follows:

"Children were classified as normal, retarded, and exceptionally retarded, the latter comprising all children with mental deficiency.

"The Binet-Simon tests were used in this survey to show the general mental development of the children examined. In the case of the exceptionally retarded children, however, special methods were employed to determine the mental status of each child so recorded.

"Of the 1,087 girls and 1,098 boys examined in the rural schools, 93 of the former and 100 of the latter were below the average mentally, or 8.7 per cent of the whole number. The total number needing specialized instruction was 214, or 9.3 per cent.

"Seven girls, or 0.6 per cent, were retarded in such degree that their mental development at adult life would not be greater than that of children. Of these, 28 per cent were below the mean physical development for the county.

"Of the boys, 1.2 per cent were exceptionally retarded. Of these, 28.5 per cent were below the mean physical development of the county as a whole. Of the total school population, 0.9 per cent were mental defectives. The percentage of exceptionally retarded children recorded in the county is considerably less than that found by other observers in other localities.

"Of the physical defects associated with retardation, those of the special senses, with the exception of defective hearing, were found in greater proportionate numbers among children who were simply retarded. The exceptionally retarded children were above the average stature of the county in greater proportionate numbers than retarded children.

"The undue number of one-room rural schools in the county which were of faulty construction, with poor equipment, and with imperfect teaching facilities, were largely responsible for the retardation found in the county.

"The average loss of grade by 193 children, as recorded by teachers, was 1.28 years for girls and 1.5 years for boys, a total of 269 school years.

"No special classes for the instruction of retarded children were found in any of the rural schools of the county.

"In addition to the 214 children who were retarded and exceptionally retarded, 3 epileptics and two constitutionally inferior children were found among the school children of the county."

In regard to the relation of mental deficiency to the community, and on the question of juvenile delinquency, Dr. Clark writes as follows: "Recent investigations of the defective and delinquent classes have demonstrated that a large percentage of criminals, paupers, tramps, and prostitutes are really congenital imbeciles who have been allowed to grow up without training or discipline. Society suffers the penalty of such neglect through an increase in pauperism, vice, and crime, and the greatly increased cost of the care of adult feeble-minded persons.

"Feeble-minded girls, exposed to evil influences, are unable to protect themselves from the perils peculiar to women. There is hardly a poorhouse in this country which has not one or more feeble-minded women who are mothers of several illegitimate children. It is often the case, in rural communities, that a girl of this type, when illegitimately pregnant, has no place to go except to the almshouse. After the community has borne the expense of three or four confinements, she is finally committed to an institution for the feeble-minded. From every consideration of morality, humanity, and public policy, feeble-minded women should be under permanent and watchful guardianship, especially during the childbearing age.

"In every community there are a number of children who are morally irresponsible. They show no marked deficiency of the intellectual faculties, but early in childhood manifest a perversion of the moral sense, which is shown by motiveless, persistent lying and thieving, an impulse to arson and cruelty to animals and to younger and helpless companions.

These constitutionally inferior persons comprise a large percentage of habitual criminals. The presence of one or more children of this type in school exercises a pernicious influence that is usually associated with an increase in the number of children who fail to make grade. It is undesirable to permit children of this type to attend school. It is still more undesirable to turn them loose on the community without restraint, because they are potential criminals in a poor environment. It is incumbent on the state, therefore, to care for such children and give them suitable training."

FEEBLEMINDEDNESS AMONG ADULT DELINQUENTS

Haines reports in the January number of the *Journal of Criminal Law and Criminology*, the results of an examination by the Yerkes-Bridges Point Scale, of the prisoners admitted to the Ohio Penitentiary from September 16 to October 21, 1915. There were one hundred prisoners admitted during the period. Twenty were found to be feeble-minded although the reservation is made that three of the twenty may be dements. There were, also, several border-line cases which "on more careful and prolonged study, may prove to be feeble-minded."

In discussing his method of scoring and the difficulty met with in differentiation in border-line cases, Haines says: ". . . it is the height of absurdity to consider all adolescents and adults, who fail to score the average of twelve-year-old children in the intelligence tests, as feeble-minded. Many persons who are able to earn their own living and do not manifest anti-social traits in any offensive way, will not measure to this standard. It is probable that a mentality of eleven, as measured by intelligence tests, is much more nearly the line where doubt as to integrity and sufficiency of intelligence should enter as we go down in the scale, measuring adult intelligence. The group who score under twelve but over eleven is thus seen to be somewhat critical in consideration of the number of feeble-minded among this population of delinquents. But the common sense of any competent mental examiner should save him from the self-stultification of classing these subjects as feeble-minded. Many of them may be and some doubtless are total defectives. But this holds likewise of the delinquents who test twelve and above. We find so many competent citizens whose intelligence as measured by these tests is not above ten and a half years, that it constitutes no scientific explanation of the delinquent to class this group as feeble-minded. They have enough common sense to manage themselves and their affairs with prudence, if they *would*. If not responsible, the lack of responsibility does not lie in plain *simpleness*. They have sense enough to be reformed. Their reformation must lie in the realm of the will. We must secure their co-operation. We must get them to *want* to be social and to *live* lives of helpful co-operation with others. . . ."

In the remaining eighty prisoners who did not appear to be defective in the ordinary sense, Haines notes "a great collection of character anomalies." "These persons, despite their seemingly good endowment with ability to adapt themselves to circumstances, are many of them abnormal in their mental constitutions. We can not dwell upon this point. An illustration will make clear our meaning. Number 899, a well-developed man of forty-two years, born in West Virginia of American-born parents, convicted of 'burglary and larceny,' and for the third time in the penitentiary passed the tests with a score of eighty-two points, despite the fact that he considers the whole procedure very foolish, and evidently could do much better if he would. The man has occupied many positions of importance, as his ability warrants. But he can not hold himself up to his best standards, or to passingly good standards of action. He said himself, he is a periodic drinker. He says he just goes to nibbing, thinking he is sure of himself and he is lost. He was off from work once for two years from such a beginning. Such character is not normal, and yet he is not feeble-minded, and he is not insane in the ordinary sense. Of such morally defective organization are many of our delinquents both adults and juvenile. Many of these defects are correctible. It is evident, however, that they are sick souls, and that the wardens and chaplains of our correctional institutions need the help of clinical psychiatrists in their work with these persons. Their business is treatment with a view to producing recovery and restoration to normal living. Before the doctor prescribes for his patient, he should know what is the matter. Every delinquent should have a mental examination, as well as a physical examination, and an exhaustive study of his family and personal history, when he enters upon his residence in a reforming institution. His mental examination should be as imperative and as much a matter of course as is the bath of a person entering a general hospital."

POSSIBILITIES IN SOCIAL SERVICE FOR PSYCHOPATHIC PATIENTS

". . . In seventy-five per cent of the cases at the Psychopathic Hospital it seems clear that adequate care of the patient requires social work.

"Along with the immediate care of patients there are certain indirect results from systematic social service, which are of no less importance. (1) Medical work is promoted by the assistance given to physicians by social workers in obtaining the histories of patients. Often a diagnosis is not possible without a knowledge of the patient's past conduct and environment. In many cases continuous observation of the patients in the community, and experiments in adjustment of his environment, are necessary before the diagnosis can be determined. In this way an earlier diagnosis can be made, which is not only of primary importance to the patient, but also important to the study of mental disease. In treatment, the physician is assisted by the social worker who sees that patients, who otherwise would fail to return to him, report at the hospital as long as he considers it necessary; and also sees that patients carry out his directions.

"Many medical problems on which psychiatrists are working cannot be studied thoroughly without social work; for example, in studying the effects of syphilis in families of known syphilitics, it is esssential to have a social worker who can persuade the families to come to the hospital for examination.

"(2) The hospital social worker serves the community in seeing that families of patients, who otherwise would drift into privation, are provided for or helped to be self-supporting;—a mother left with two young children when her husband was committed is able to support them with the help of a relative, a day nursery, and position that was found for her. Another saving to the community is brought about through the examination and early treatment of other psychopathic individuals in the families of patients. In one family nine persons, in addition to the little girl who was the original patient, are now under the care of the Out-Patient Department at the Psychopathic Hospital.

"(3) The saving of expense to the state in the prevention of crimes by psychopathic individuals through social supervision cannot be calculated; but specific instances indicate that it may be considerable. Several years ago Mr. Homer Folks said the State of New York spends 'one-seventh of its income in taking care of its insane, but it is a relatively unproductive expenditure.' This year the New York state hospitals will spend approximately $7,000 of their appropriation for social service as the first step in a general movement for preventive work.

"Through the care of social workers, many patients who would become a charge upon the state are kept at home either self-supporting or maintained by relatives. During our two years' work at the Psychopathic Hospital, twenty patients, who by all indications would otherwise have required institutional care, have been kept in the community through the activities of the Social Service. Averaged at a saving to the state of one year's maintenance each, they show a saving of $5,200, which is $700 more than the amount paid by the state in salaries to our social workers during this period. As three of these patients, who were insane, were returned to their native countries, the state was probably saved in their cases many years' support. So that in relation to the state treasury, this department has more than paid for itself.

"A community plan for social service for psychopathic patients would begin with the public health service. Child hygiene is now a recognized part of this service; for physical illness private organizations furnish district nurses; and the health officer is beginning to talk of mental hygiene as a function of public health work. This would mean eventually a psychopathic social worker in every district, working in co-operation with the psychopathic clinics and hospitals, under some form of organization that would insure both social and medical supervision. Then each hospital should have its staff of social workers, both for out-patients and ward patients. At the present time for all the state hospitals of Massachusetts the necessary number of social workers would probably not exceed 25, estimating that one worker is needed for every 200 admissions in a year. This number does not seem surprisingly large when it is considered that the State Board of Charity employs about 100 special workers in the care of dependents; the Boston Consumptives' Hospital alone requires 24 visiting nurses; the Massachusetts Training School employs 16 visitors for their paroled boys and girls. There were 147 physicians, exclusive of superintendents, employed by the state hospitals last year. Taking into consideration the large proportion of time a social worker must spend in travelling, the proportion of the number of persons required for the social work in relation to the medical staff is not high.

"A comprehensive plan for social care of the psychopathic also includes a certain amount of knowledge of mental defect and mental disorder as part of the training of all social case workers in whatever agencies. The social worker of a relief agency who, instead of thinking a man whose family had applied for aid, was 'lazy, cranky, or ugly,' recognized indications of general paresis and sent the man to our Out-Patient Department, has saved much suffering and wasted effort, and has given the man what chance there may be of improvement through treatment. The visitors of social agencies have large opportunities for bringing under medical care early cases of mental disease.

"In conclusion, social service for psychopathic patients seems to be a natural development in the movement for improved care of the insane. It has its origin in practices that have always existed in hospitals for the insane in an unorganized form. As a systematic method, it has been stimulated by recent developments in sociology and medicine. The medical profession will naturally move with caution in the extension of systematic social work, and it is well that they should, so long as caution is distinguished from inaction. The logical development of the principles of social service leads to the belief that eventually social examination and treatment will go hand in hand with medical examination and treatment in the care of all psychopathic patients. To realize this object the training and education of social workers must be advanced to be comparable with medical training. Ultimately, it may be expected that psychopathic social work will be part of the local public health service and of the organization of all psychopathic and insane hospitals."

FEEBLEMINDEDNESS AND THE LAW

". . . It is above all things essential that the commitment of the feeble-minded to institutions should be a civil procedure and not a criminal one. It is almost equally desirable that the elements of compulsion should be reduced to a minimum. Holding beneath the velvet glove the inflexible right of compulsion, the state should afford every opportunity for voluntary admission for the feeble-minded, and our institutions should be administered and conducted with the aim of making them the kind of places to which you or I would voluntarily send a defective child.

"Detention in an institution for life is, for a large part of the feebleminded population, the state's best assurance of a safe, happy, economically useful and harmless life. Nevertheless, there are a considerable number of mentally defective persons—just precisely how large a proportion we do not know—who could live safely in the community under a suitable system of guardianship and supervision. Such a system of guardianship can best be provided by following the precedents set by our statutes for the welfare of children. Real children, like the feebleminded, are unable to protect themselves; like the feeble-minded they are often unable to manage their affairs with ordinary prudence; they lack control at times over their own desires and appetites and conduct and yet of the million and a half children of school age in New York City, but one in every 200 came into any serious conflict with the peace authorities last year. The law, soundly based upon public sentiment, protects real children in the streets, in the factories and in their homes, and it sees that they receive the supervision and guardianship which their immaturity demands. It is essential when considering feeble-mindedness from the legal point of view to remember that biologically it is only a condition of continuing childhood. No matter how many years the feeble-minded person lives, he remains a child in intelligence, in judgment and in self-control. His childish frame dissolves in the physical conformation of the adult and he becomes capable of reproduction, his knowledge of certain phases of life increases—the man of thirty with a child's mind has used that mind for thirty years and in some ways uses it more deftly than a child does—but, nevertheless, the brain which directs all his activities remains, structurally, the brain of a child. The laws in this state provide for the commitment of insane persons to guardians who have power delegated to them to control not only an incompetent person's body but his estate. The only way in which a similar guardianship can be established in the case of the feeble-minded is by stretching the law regarding the insane or by calling them idiots without regard for their degree of mentality or the fields of life in which guardianship is specifically required. It would seem within the power of the leaders in the legal profession to devise in this country, as has been done in England, a statutory and administrative mechanism whereby the protecting arm of the state can guard the feeble-minded throughout life as it now protects those who are children both in years and mentality.

"It is obvious that we have in our population a considerable group of persons who are children in mentality, although adults in years, in stature and in physical activities; we have a group for which we must set a different type of criminal responsibility than the law has fixed for the rest of mankind. Our reformatories and jails are filled with mentally defective persons whose so-called crimes are far more the consequence of their community's neglect and ignorance than of any inherent capacity for wrong-doing on the part of the individual. There is a youth to-day in the penitentiary at Blackwell's Island who, during all his childhood, was recognized as feeble-minded and spent his school days in the ungraded classes. Soon after he left the ungraded classes he was sent to the institution which the city maintains for the feeble-minded at Randall's Island. Thus as a school child and as a dependent adult his mental defect was recognized and the city dealt with him squarely upon that basis. But having to leave Randall's Island on account of the limited capacity of that institution and the enormous pressure for the admission of new cases, he became a vagrant. New York City possessed a suitable mechanism for dealing with him as a feeble-minded child in its educational system and in its charitable activities but, when he was accused of misconduct, no such mechanism existed. So now the same boy who was feeble-minded in all other relations of life is regarded as a criminal and is in danger of being converted into one by the same city which intelligently modified its educational system to deal with him and his kind. Criminal responsibility, therefore, must be defined more justly and more usefully in the case of the feeble-minded than it is at the present time."

Inebriety from a Medical Viewpoint

". . . It can no longer be said that the chronic inebriate is an enigma. The study of inebriety has shown conclusively that the victim is pathologic; furthermore, it has been proven that the chronic inebriate condition is a clinical entity, and that the pathognomonic symptom, habitual drunkenness, is but an expression of a constitutional peculiarity, the peculiarity intimating a susceptibility to a toxic agent. It is not sufficient for us to dismiss the subject by a mere acknowledgment of the condition, and declare the drunkenness wilful in the sense that the drunkenness and the consequent symptoms could have been controlled by the patient. With as much reason could we maintain that the paroxysms of hysteria or the habit mannerisms of the neurasthenic could be controlled or prevented by the sufferer. In these two mental diseases, we recognize a psychoneurotic cause; an analogy can be observed in the inebriate condition. The failure of the physician to recognize the underlying mental causes which are alone responsible for the inebriate syndrome, has been the incentive for the many ill-timed, ill-regulated, and unethical methods which have been advanced for the cure of drunkenness. The attitude of the medical profession toward inebriety should be in its fullest sense an appreciative one, an appreciation of its true significance, and coincident with this appreciation there should be an intimate knowledge of the preventive and curative measures which should be employed for the proper management of the condition. It is not consistent with our medical ideals and our humanitarian instincts to neglect a subject that is one of the more important medico-social studies of the present day. . . .

"The following deductions are offered as medical truisms. We have elaborated them from our experience and offer them as a working basis.

"(a) Inebriety is an expression of nervous weakness or instability. Used in its simplest sense, it could be called a psycho-neurosis. Many cases show symptoms which are found in neurasthenic states and allied conditions. Drunkenness is a symptom of an unstable nervous system, and a contrary view is not justified by clinical observation or experience.

"(b) The exciting causes of inebriety are of a physical and psychical origin; given a predisposed subject, the crisis of inebriety may be precipitated by any marked departure from ordinary routine (psychical), or by any disturbance of a physical nature (physical).

"(c) Inebriety is prone to develop at the critical epochs of life, namely, pubescence, adolescence and involution. Developing during involution, it is generally the effort of an individual to maintain his productive powers by recourse to artificial stimulation. The declaration of inebriety at these periods suggests an analogy to the psychoneuroses.

"(d) Inebriety, being an expression of neuropathy or psychopathy, may be preceded by or accompanied by a multiform nervous syndrome. Thus each case is essentially different.

"(e) A comparatively small percentage of the users of alcohol are confirmed drunkards or inebriates.

"(f) The appropriate care of inebriety implies both curative treatment and custodial care; curative treatment being directed to the case which is likely to be benefited, the custodial care, for economic reasons, should be directed to the recidivists. For the purpose of individualization in treatment, such a differentiation must eventually be made and an appropriate segregation of these two types established.

"The fundamental part of the system which is now in successful operation in Massachusetts is the recognition of the true personality of the inebriate, and consequently an appreciation of the need of specialized and distinctive treatment for the condition. We realize that the syndrome which we call drunkenness has mental and physical elements which require accurate differentiation and individualization. In inebriety there is apparently a physical desire to combat; this physical desire has been described as in all probability a reflex, the dominant cause being a psychologic element of nerve habit; in other words, as one author has very tersely put it, as the alcoholic's physical desires are increased to the point of frenzy by his mental interpretation of such desires, so can no cure be successful without his mental belief that he is improving and can be cured; hence, no cure has been or can be successful that does not treat the mind of the patient,—that is not suggestive. Again, ill success in the treatment of cases can often be attributed to the failure of the physician to recognize this fundamental point in the psychology of the patient; as in other diseased conditions, the probability of permanent improvement is enhanced by recognizing inebriety in its incipiency. The pathognomonic symptom of inebriety, alcoholic toxemia, and the consequent habitual intoxication, is an indication for immediate treatment, which should be instituted before the confirmation of the habit. Inebriety is a medico-social study. The medical profession should take the initiative in devising a method for the education of the public to the dangers of alcoholic excesses and abuses. The physician should naturally assume the leadership in promoting any measures inaugurated for the prevention or amelioration of drunkenness. By assuming such responsibility he is exercising his prerogative. The public, assured of the use of a scientific and well censored method, will eventually regain its lost confidence, and, naturally, it will follow that public sentiment will sustain any practical and uniform method advanced for the treatment of public drunkenness."

Psychiatric Family Studies

As its principal subject this paper discusses the fate of the *insane* descendants of the insane. The fate of the *sane* descendants is proposed as a future research.

The paper is divided into five parts:

Part I. The literature concerning the doctrines of the polymorphism of insanity and of Mendelism is reviewed. The former doctrine, polymorphism, accredited to Esquirol and Morel, and elaborated by Crocq, Frere, and Lombroso, asserts that all forms of insanity and degeneracy as well as criminality and genius are related, form a biological unit and by inheritance pass from one generation to another in a regular order. "We have thus the extraordinary linking of the highest and lowest mentalities through a chain that is made up of almost every conceivable manifestation of human aberration." Classically, four generations elapse from the peculiarity and nervousness of the first generation to the idiocy and race extinction of the last.

Against Mendelism as applied to the transmission of the psychoses the author states that "the efforts of these writers seem to be directed not so much to discover the laws of the transmission of insanity as to fit the facts to Mendelian theories." He argues that the laws of Mendelism have not yet applied to any single human character and that it is grossly premature to apply them to the whole broad and complicated field of the psychoses. Moreover, normality itself is only an abstraction, an ideal, not a unit dependent upon a unit group of determiners.

Part II. Contrasts the heredity of the insane and the non-insane as brought together by von Jauregg from the figures of Koller and Diem. Out of the contradiction of the statistics there nevertheless arises these facts: That insanity in a collateral relative is as common in the non-insane as the insane, though insanity, alcoholism, and character anomaly in a direct ancestor are much more common in the insane. That organic nervous disease, such as cerebral hemorrhage, is more common in the ancestry of the sane than the insane and, therefore, can not be regarded as of significance from the standpoint of the inheritance of insanity.

Part III. Deals with the marriage rate of the insane. The author asks, "Do the psychoses interfere with the marriage rate, or rather does the condition underlying the psychoses—alcoholism, syphilis, psychopathic-constitution—interfere with marriage? Do the male and the female insane marry in equal ratio?" The answer is as follows: The female insane and the general paretics, both male and female, marry in slightly less proportion than does the total population. Alcoholic males marry in much reduced ratio, while alcoholic females marry in nearly normal ratio. It is to the dementia praecox group that marriage offers the greatest barrier, for here both the male and female ratio are very low and the former, the male rate, is only about one-half of the latter, the female rate. "Marriage acts as a barrier to the propagation of the abnormal in so far as this is connected with endogenous factors. It is not such a barrier against certain of the exogenous race poisons, such as syphilis." Furthermore, the female insane, through their increased chances for marriage, are more dangerous to the racial welfare than the male. Again, since marriage is based largely on selection by the male, the more normal of this sex tend to marry, while the abnormal tend to remain single. While this is in a measure true of women, it is also true that proportionately more normal women than men must remain unmarried, while more insane women than men, because they are attractive to the males, are chosen for marriage.

Part IV. Deals with the statistics of the Taunton families. Six hundred and sixty-three families, divided up into 1 family with 4 generations of Taunton State Hospital history, 23 with 3 generations, 333 with 2 generations, and 307 with 1 generation of such history, are discussed. The author comes to two main conclusions: 1st, that while females predominate in numbers, this is more largely of social than of biological origin; 2nd, that while descendants tend to come in earlier than their ancestors (anticipation or antedating) this is not nearly so important as Mott believes, because of the method of collecting the statistics.

Part V. Takes up the details of the histories of 98 families which, except in the case of those where more than two generations are represented, are related in the direct line, *i. e.*, represent a parent and descendants. The problem set himself by the author is—*Given a certain type of insanity, what type of insanity are we to expect in the insane descendants?* The answer given is based on the author's cases and on those cited in the literature.

Paranoid diseases in the parent breed paranoid diseases and dementia praecox in the descendant. Involution psychoses breed dementia praecox. Senile psychoses in the main are followed by dementia praecox. Manic-depressive is followed by manic and dementia praecox (though here the author emphasizes the fact that typical manic is followed by manic and only the atypical by dementia praecox). Dementia praecox is followed by dementia praecox and in lesser degree by imbecility and epilepsy. Thus the insane descendants of the insane tend toward dementia praecox, though perhaps in the case of manic-depressive in an ancestor this trend is not unequivocal.

The author concludes that the four generation transmutation theory of Morel, *i. e.*, four generations of insanity and degeneracy to race extinction, is too rigid and formal to fit the facts. Moreover, at least a good part of the descendants of the insane are not themselves insane, do not tend to race extinction, and no known formula applies to them.

The author deals rather sketchily with the relation of insanity to genius, tuberculosis, alcoholism, and crime, and conceding that his cases do not bear directly on these problems points out arguments against any inherent relationship. A program for further research along lines that will determine the fate of those descendants of the insane who do not return to the hospitals concludes this long paper.

NOTES AND COMMENT

The legislatures of forty states are in session this year. Most of them have under consideration bills providing more adequate care and treatment for those suffering from mental disease or mental defect. Additional hospitals for the insane are being asked for in Texas, Tennessee, Pennsylvania, California, Indiana, North Dakota and Massachusetts. Interest in behalf of the feebleminded is particularly strong in Oregon, South Carolina, Ohio, Utah, Missouri, Pennsylvania, Wisconsin, California, Illinois, Delaware, Minnesota, New York, Washington, Maine, New Hampshire, Arkansas, Arizona, New Jersey, Maryland, Indiana, Idaho, Massachusetts, North Carolina and South Carolina. Institutions for the feebleminded are being asked for in Delaware, Pennsylvania, Massachusetts, South Carolina, Arkansas, Arizona, Utah, California and Washington.

The July number of MENTAL HYGIENE will contain a résumé of the work accomplished by the legislatures in the field of mental hygiene.

Bills providing for the sterilization of individuals of certain defective and criminal types are before the legislatures of Kansas, Ohio, Oregon, Illinois and Pennsylvania.

A committee has been appointed by the Directors of the Associated Charities of New London, Conn., to work for the establishment of a Mental Hygiene Clinic in New London.

Dr. H. I. Klopp and Dr. W. H. Hartzell of the State Homeopathic Hospital in Rittersville, Penn., have co-operated with the Associated Charities of Allentown in opening a Mental Hygiene Clinic.

When plans now being made by the New York State Hospital Commission are completed, patients in the state hospitals will assist in preparing hospital supplies for the European war hospitals. Materials will be furnished by the British and Belgian Relief Committee.

A recent survey of the facilities in the state of Tennessee for the proper care of persons suffering from mental disease showed that the three state hospitals were badly overcrowded. An effort is being made to obtain in the present session of the legislature the passage of a bill authorizing the building of a fourth hospital.

In accordance with the recommendation of a Commission on Feeblemindedness appointed in 1915 to study the needs of the feebleminded in the state of Arkansas, the legislature of the state has recently passed, and the governor has signed, a bill authorizing the purchase of a site of unimproved ground for an institution for the feebleminded. This institution will be the first institution for the feebleminded in the state.

The Commission on Feeblemindedness appointed last year by the governor of Utah has reported four feebleminded persons to the thousand in the state and has urged an appropriation of $105,000 for the erection and maintenance of an institution for the feebleminded and $6,000 with which to continue the survey of the state. A bill (H. 67) authorizing the establishment, under the state Board of Education, of two colonies for the care and training of the feebleminded, one for men and one for women, was presented to the legislature but failed.

PSYCHOPATHIC HOSPITAL IN SAN FRANCISCO

Two bills (Assembly 897 and 898) have been presented to the California legislature providing for the establishment, government and maintenance of a psychopathic hospital under the management of the Board of Regents of the University of California to be located at or near the University of California Medical School in San Francisco. The bills contain, among others, the following items:

Hospital to accommodate 100 patients and the necessary officers, nurses and employees;

To have an out-patient department;

The director by virtue of his position to be professor of psychiatry in the University of California and pathologist to the state institutions for the insane and mentally defective;

To provide for the voluntary admission of patients;

To provide for the temporary care of patients;

To provide for the transfer of patients;

To provide an appropriation of $100,000 or as much thereof as may be necessary for the purchase of land;

To provide $400,000 or as much thereof as may be necessary for the construction, equipment and furnishing of the buildings:

An effort has been made to transfer the insane now in the prisons of Maryland to the state hospitals but this has been found impossible as the sum allowed for the maintenance of the criminal insane has been exhausted.

FEEBLEMINDED IN CALIFORNIA

Additional provision for the feebleminded in California is contemplated in Assembly bill 602 now before the legislature establishing an institution for the feebleminded and epileptic in the southern part of the state. The bill calls for a site of not less than 800 acres. In addition to the usual forms of commitment, the superintendent is authorized to admit to the colony temporarily without commitment, for purposes of observation, such children or adults as are suspected of being feebleminded. The transfer of patients to and from the Sonoma State Home is also provided. Authorization is given for the sterilization of inmates before release or discharge when it seems advisable. The bill carries an appropriation of $250,000.

A bill to establish a second hospital for the insane in North Dakota has failed.

A bill appropriating $75,000 for new buildings at the Caswell Training School for the Feebleminded has been passed by the Senate of North Carolina.

A bill for the establishment of a school for feebleminded white persons and carrying an appropriation of $60,000 has been passed by the House of Representatives in South Carolina.

If a bill now before the Connecticut legislature is passed special wards will be provided in the Connecticut Hospital for the Insane for the treatment of drug inebriates and all such persons will, thereafter, be committed to this institution.

The only institution for the feebleminded in the state of Washington is located in the eastern part of the state. A bill is now before the legislature providing for a second institution to be located in the western part of the state. A second bill would change the name of the Institution for the Feebleminded, at Medical Lake, to the "State Custodial School."

Fourteen hundred epileptic and feebleminded persons are on the waiting-lists of the Ohio institutions. To relieve this situation a bill is being considered by the legislature which provides for the building of eleven additional cottages at the Institution for the Feebleminded in Columbus and nine cottages at the Ohio Hospital for Epileptics in Gallipolis.

Compulsory commitment of feebleminded children to state institutions has been provided by a bill passed at the present session of the Oregon legislature. Other bills being considered by the legislature provide for the sterilization of sexual perverts and the feebleminded, and the appointment by the Board of Control of a commission to investigate the cause of delinquency and feeblemindedness among children.

PENNSYLVANIA VILLAGE FOR FEEBLEMINDED WOMEN

The Pennsylvania legislature in 1913 authorized the purchase of a site for the establishment of a colony for the feebleminded. A Board of Managers was appointed and a site purchased at Laurelton. The legislature in 1915, however, failed to make an appropriation for the continuation of the work. A bill (S. 170) has been presented to the present legislature authorizing an appropriation of $346,000 for the purchase of further land and for the construction and equipment of buildings for maintenance and for necessary improvements.

Ten thousand dollars has been voted by the Indiana legislature to continue the work of the commission that has been studying the problem of mental defect in the state.

Indiana House bill No. 392 authorizes the voluntary admission of patients to the state hospitals for the insane, and the extension of the hospital service in the interest of the prevention of mental disease and the after-care of patients discharged from the hospitals.

The Indiana Senate added by amendment an item to an appropriation bill which provides $250,000 for the purchase of a site for a sixth hospital for the insane.

A bill presented to the Rhode Island legislature eliminates the word "insane" from the name of the Rhode Island State Hospital. A second bill provides that dipsomaniacs, inebriates and persons addicted to the excessive use of narcotics may be committed to the state hospital.

An effort is being made in Kansas to have the state institutions placed under the administrative care of a state manager.

A bill providing for the establishment of a home for the care and training of the feebleminded has been passed by the legislature of Delaware. The bill carries an appropriation of $10,000, and in addition provides for the establishment of a Delaware Commission for the Feebleminded.

Work at the new Wisconsin State Home for the Feebleminded and Epileptic at Yorkville is progressing rapidly and the main building will be ready for occupancy in May.

Bills have been presented to the Wisconsin legislature changing the name of the Milwaukee Hospital for the Insane to the "Milwaukee Psychopathic Hospital"; the Milwaukee Hospital for Chronic Insane to "Milwaukee Hospital for the Cure of Mental Diseases"; the Milwaukee County Almshouse to "Milwaukee County Infirmary."

If a bill now before the Wisconsin legislature becomes a law epileptics in Wisconsin will be compelled to advertise the fact of their epilepsy before marriage.

The bill providing for compulsory commitment of the feebleminded in Illinois has placed such a burden upon the Lincoln State School that more adequate facilities have become necessary. An effort is being made to obtain an appropriation for the school of $1,000,000.

The Norfolk (Mass.) State Hospital, a hospital for the care and treatment of inebriates, is at present equipped only for the care of men. A bill is now before the legislature creating a department for women.

VIRGINIA SOCIETY FOR MENTAL HYGIENE

The Virginia Society for Mental Hygiene was organized at a meeting held in Richmond, March 15, 1917. A constitution and by-laws were adopted and the following officers elected: Dr. Douglas S. Freeman, President; Mr. Harvie D. Coghill, Secretary; Dr. H. C. Henry, Treasurer.

An Executive Committee was formed composed of: Dr. Ennion G. Williams, State Health Commissioner, Richmond, Va.; Rev. J. T. Mastin, D.D., Secretary, State Board of Charities and Corrections.

Richmond, Va.; Rev. J. J. Scherer, Richmond, Va., a leading minister and social worker; Dr. A. S. Priddy, Superintendent, Virginia Colony for Epileptics and Feebleminded, Madison Heights, Va.; Dr. William F. Drewry, Superintendent, Central State Hospital, Petersburg, Va.

The following were elected Directors: Mr. R. B. Cooke, Norfolk, Va.; Dr. E. H. Henderson, Superintendent, Southwestern State Hospital, Marion, Va.; Dr. A. S. Priddy, Superintendent, Virginia Colony for Epileptics and Feebleminded, Madison Heights, Va.; Rev. J. J. Scherer, Richmond, Va.; Rev. J. T. Mastin, Secretary, State Board of Charities, Richmond, Va.; Dr. J. C. King, E. Radford, Va.; Dr. W. F. Drewry, Superintendent, Central State Hospital, Petersburg, Va.; Dr. J. S. DeJarnette, Superintendent, Western State Hospital, Staunton, Va.; Dr. G. W. Brown, Superintendent, Eastern State Hospital, Williamsburg, Va.; Mr. W. H. Landes, Staunton, Va.; Hon. Harry Houston, Hampton, Va.; Hon. J. Hoge Ricks, Judge, Juvenile Court, Richmond, Va.; Col. Lucius Gregory, Chase City, Va.; Miss Hattie Hilton, Danville, Va.; Hon. W. E. Addison, Editor, Lynchburg, Va.; Hon. R. H. Willis, Roanoke, Va.; Hon. Irving P. Whitehead, Lynchburg, Va.; Dr. H. C. Henry, Petersburg, Va.; Dr. Ennion G. Williams, State Health Commissioner, Richmond, Va.; Miss Annie M. Peterson, Superintendent, Virginia Home and Industrial School for Girls, Bon Air, Va.; Miss Roller, Richmond, Va.; Mr. H. D. Coghill, Richmond, Va.; Dr. H. U. Stephenson, Toano, Va.; Dr. H. B. Frizzell, Superintendent, Hampton Industrial School, Hampton, Va.

Ohio House Bill No. 150 provides that any board of education may establish a special school or schools for feebleminded children over eight years of age, such schools to be on the same basis as schools for the deaf, blind or crippled children.

The Idaho legislature is considering a bill (H. 284) authorizing the State Board of Education to commit feebleminded pupils to the State Sanitarium at Nampa, after an examination by a superintendent of schools, a physician and a psychologist.

The Missouri legislature has under consideration a bill providing for increased facilities for the care of the feebleminded and authorizing school authorities to establish schools for the feebleminded and for deaf and blind children.

Purchase is contemplated of 2,000 acres of land near St. Louis for a municipal farm to which work-house prisoners, inebriates and mental defectives will be sent.

The Governor of Minnesota has appointed a Volunteer Child Welfare Commission. The commission is composed of four sub-committees, one of which is to study the problem of defective children, the feebleminded and epileptic. The question of the registration of marriage and of sterilization will also be considered by this committee.

An effort is being made in Minnesota to authorize the substitution of the words "mental disease" for the word "insane."

Compulsory commitment of the feebleminded is provided in a bill before the Minnesota legislature.

The Massachusetts Commission on Mental Disease has planned a state wide development and extension of the psychopathic hospital service by establishing new hospital and out-patient units in suitable districts in connection with existent or future state hospitals.

Permission to sell the Northampton State Hospital is being asked by Massachusetts Commission on Mental Disease. If the permission is granted it is probable that the hospital will be sold to Smith College and a new hospital built at Pittsfield or Springfield.

The Massachusetts Bureau of Prisons is asking for an appropriation for a psychopathic hospital to be built at the Sherborn Reformatory for Women. The bureau is also asking for privilege to purchase additional land for the Concord Reformatory in order that a colony may be provided for the segregation of the mentally defective now in the institution. A third bill has been presented providing for a psychiatrist at the Charlestown State Prison. The work at Charlestown is now being done voluntarily by Dr. A. Warren Stearns.

NEW PENNSYLVANIA HOSPITALS

Two new state hospitals for the insane are planned for in Pennsylvania, one to be in the eastern and one in the western part of the state. The latter was authorized by the legislature in 1915 and a site was purchased in Westmoreland County. The present legislature is asked to appropriate $800,000 with which to begin the construction of buildings. The total cost is not to exceed $1,500,000. The bill providing for the Eastern State Hospital calls for a site of not more than 500 acres to be located east of the Allegheny Mountains and to cost not to exceed $50,000. The hospital is to accommodate at least 1,000 patients.

Efforts are being made again this year to obtain a new hospital for the insane in the Metropolitan District of Boston. A site for this hospital was purchased some time ago.

Massachusetts House Bill No. 393 extends the parole period of patients from the state hospitals from six months to one year.

The Superintendent of the Institution for Feebleminded at Columbus, Ohio, is making arrangements to send 100 boys and young men from his institution to the State Farm at Orient where they are to do farm work. The farm has formerly been worked by prisoners from the penitentiary.

The Pennsylvania legislature is being asked for an appropriation of $350,000 for the Elwyn School for the Feebleminded.

The Colorado Senate has passed to second reading a bill to establish a home for drug addicts

A "Eugenic Marriage" bill has failed in the Illinois legislature.

FAMILIES OF PARETICS

For a period of two years the Boston Psychopathic Hospital has conducted a routine examination of the families of all patients who have a positive Wassermann, whether house patients or out-patients. It is felt that this procedure is essential for proper prophylaxis as the family of a paretic is the family of a syphilitic and if the husband has a positive Wassermann it is quite possible that the wife may be suffering from conjugal syphilis and the children from congenital syphilis.

The work has been made possible through the aid of the Social Service Department which has secured private contributions for the salary of a special social worker. This worker endeavors to have the spouse and children of adult married syphilitic patients and the parents and siblings of syphilitic patients under 18, come to the hospital for a Wassermann test and, in the case of children, for a complete mental and physical examination. A letter is sent asking the family to report unless members of the family have already been seen at the hospital. If there is no response to the letter a visit is made. The family is systematically followed up whether the original patient is an adult or child.

By this method much unsuspected syphilis, both congenital and acquired, has been discovered. Arrangements are made for the treatment of paresis, tabes, cerebrospinal syphilis and certain cases of congenital syphilis at the Psychopathic while other cases are directed to general hospitals or to private physicians.

Of the families asked to come in for examination a high percentage have responded and many relatives of the original patients have been found to have a positive Wassermann. The objection at times raised, that a hospital has no right to interfere in this matter as there is danger of breaking up families by urging a test for syphilis, is answered by the fact that in the entire experience of two years with a large number of families this has never been known to happen.

At an early date a report of this work will be published in full.

NEW YORK AWAKE TO FEEBLEMINDED PROBLEM

New York State is about to attack in earnest the problem of dealing with its feebleminded. The present legislature is frankly recognizing the size and seriousness of the job of segregating the uncared-for feebleminded. Indications are that substantial appropriations for new construction will be made this year and that the state will start on a program of systematic up-building of state institutions upon which something shall be done each year for a term of years until adequate relief is obtained.

The facts of the situation regarding the feebleminded have been crystallized and effectively brought to the attention of legislators by the Committee on Provision for the Feebleminded of the State Charities Aid Association and the New York Committee on Feeblemindedness.

This effort to focus attention upon the need of appropriations for enlarging the institutions has been vigorously prosecuted. It has included the distribution of quantities of literature setting forth the facts of the situation; the furnishing of a series of timely articles and news items to newspapers throughout the state; the enlistment of strong editorial support for appropriations; the holding of public meetings by civic organizations, medical societies and other bodies, with the adoption of resolutions; the state-wide collection of data on uncared-for cases of feeblemindedness; the publication of a special issue of the State Charities Aid Association *News* and the securing of letters to the Governor and legislative leaders from organizations and individuals, including clergymen, lawyers and physicians of wide reputation. A general Mental Deficiency Act to improve the state's machinery for commitment, diagnosis and institutional care also is being drafted.

The Appropriation Bill, which was submitted to the Legislature by the financial committees on March 15th, carries $614,500 available this year for construction at State institutions for the feebleminded and epileptic, and contracts for $529,600 additional are authorized, *making a total of $1,144,100 of appropriation and authorization for the feebleminded and epileptic this year.*

In the effort to secure appropriations this year, the necessity of finishing Letchworth Village, which was started ten years ago, and of providing accommodations at the Newark State Custodial Asylum for women requiring special supervision was emphasized. The bill carries the following amounts for Letchworth Village: Actual appropriation available for new construction this year, $423,000; additional amount authorized, $529,600; total appropriation and authorization for Letchworth Village, $952,600. For the Newark Custodial Asylum the bill carries an appropriation of $52,000 to erect one cottage for inmates requiring special supervision.

These funds will provide for finishing four cottages now in process of construction at Letchworth Village and for building a group of eight new cottages there. These twelve cottages will provide for 840 inmates, increasing the capacity of the institution to 1,182. Eventually, when finished, the Letchworth institution will accommodate at least 3,000. The new cottage at Newark will provide for 50 women. The total of additional accommodations to be made available when the twelve cottages at Letchworth and the one at Newark are finished will be 890. This will increase the present capacity of the institutions, 5,399, by about 16 per cent.

The outlook for the adoption of these items in the appropriation bill is considered good. The State Charities Aid Association will direct the efforts of its campaign during the rest of the session to organizing support for the items.

In addition to the appropriation and authorization of funds, there is pending in the legislature a bill for the establishment of a Hospital Development Commission, composed of elective and appointive state officials and legislators, to make a thorough study of the whole question of providing adequately for the insane and the feebleminded and to formulate plans for a systematic constructive program covering a period of years.

On the whole, the Empire State at last seems to be fully awake to the seriousness of its problem of mental disease and defect and on the right road to an adequate and reasonably prompt solution of it.

Massachusetts Society for Mental Hygiene

At the annual meeting of the Massachusetts Society for Mental Hygiene, the Executive Secretary reported that 16 new publications had been issued during the year and that 5 were on the press making the total number of publications of the Society 27; that during the year 87,490 copies of the publications had been distributed, this number with the 37,000 distributed the year before bring the total number of copies distributed to 124,490; that 156 lectures had been delivered in the state bringing the total up to 213; and that whereas the year before 36 columns of matter had been printed in the Massachusetts newspapers, 98 columns, amounting to 12¼ full newspaper pages, had been printed during the past year.

The following directors were re-elected: Hon. Arthur P. Rugg, Chief Justice, Massachusetts Supreme Court; Miss Alice P. Tapley; Dr. Franklin B. Dyer, Superintendent, Boston Public Schools; Dr. Austen Fox Riggs; Miss Ada M. Fitts, Supervisor of Special Classes, Boston Public Schools; Dr. F. W. Anthony; Dr. Allan J. McLaughlin, Commissioner of Public Health; Dr. Milton J. Rosenau, Professor of Preventive Medicine and Hygiene, Harvard Medical School; Dr. Walter E. Fernald, Superintendent, Massachusetts School for the Feebleminded.

The following new members were elected to the board: Dr. George M. Kline, Commissioner of Mental Diseases; Colonel Cyrus B. Adams, Director, Bureau of Prisons; Dr. Harry C. Bumpus, President, Tufts College; Hon. W. T. Forbes, Judge of Probate; Dr. E. W. Taylor, Chief of the Neurological Department, Massachusetts General Hospital. At a meeting of the Board of Directors held subsequently, the following officers were elected: President, William H. Burnham, Professor of

Pedagogy and School Hygiene, Clark University; Vice-president, Dr. Walter E. Fernald; Secretary, Dr. Charles E. Thompson, Superintendent, Gardner State Colony; Treasurer, Mr. John Koren. Executive Committee: Dr. James J. Putnam, Dr. Alfred E. P. Rockwell, Miss Edith N. Burleigh, Dr. Henry R. Stedman, Prof. Robert M. Yerkes, Charles E. Ware, Hon. Frederick P. Cabot.

Iowa Society for Mental Hygiene

At a meeting held at the Chamber of Commerce in Des Moines, on March 13 preliminary steps were taken to organize the Iowa Society for Mental Hygiene. The meeting was addressed by Dr. Frank P. Norbury of Jacksonville, Illinois, who represented the National Committee for Mental Hygiene. Dr. Gershom H. Hill presided. A committee on organization was appointed composed of Judge Hubert Utterback of Des Moines, Dr. George Mogridge of Glenwood, Dr. Murdock Bannister of Attumwa, Professor Sylvester of the Iowa State University and Dr. Florence Richardson of Drake University.

Mental Hygiene Bill

Senate Bill No. 2215, commonly known as the mental hygiene bill, which authorized the organization of departments of mental hygiene and rural sanitation in the United States Public Health Service, failed in the last session of congress. The bill was passed by unanimous vote in the House of Representatives and was favorably reported to the Senate by the Committee on Public Health and Quarantine. Senator Ransdell of Louisiana, Chairman of the Committee, made repeated attempts throughout the session to bring the bill to a vote but on each occasion his efforts were defeated by Senator Works of California. As the bill was on the unanimous consent calendar Senator Works could by objecting prevent a vote. The bill has the cordial support of the United States Public Health Service, the Treasury Department, and the leaders of both sides in the House and Senate. It will be reintroduced at the next session.

The Iowa legislature is being asked for an appropriation of $150,000 with which to build a psychopathic hospital in connection with the general hospital in Iowa City. The State University and the State Medical School are at Iowa City.

BOOK REVIEWS

THE NEUROTIC CONSTITUTION. By Dr. Alfred Adler, Vienna; Moffat Yard and Company, New York, 1917. English translation by Bernard Glueck, M.D., and John E. Lind, M.D.

Since the inception of the psychoanalytic movement its students have shown a remarkable activity in applying the principles of interpretation originally enunciated by Freud over a wide field of human endeavor, and thus not only have the neurotic and the psychotic come under the critical survey of the analyst, but the whole course of cultural development has been subjected to inquiry along these lines. In addition to this growth in the extent of the movement it has manifested what seems to me to be a very healthy tendency, namely, it has shown an inclination to put forth suggestions as to new methods of approach to the problems, represented here and there by groups of workers who have tended to depart more or less from the original formulations as laid down by Freud. One of the most stimulating and valuable points of view which have been developed in this way is that of Alfred Adler, of Vienna.

The distinctive feature of Adler's approach to the problem of the neurotic character traits is that it approaches from the organic rather than from the functional side and in this way, I think, affords a very valuable viewpoint because it tends to bring together the organicist and the functionalist, who have been too long separated by the misconception of irreconcilable differences between mind and body. No small part of the opposition to the whole psychological movement, as represented in psychoanalysis, has come from the inability of the man who has been brought up to look at things from the point of view of the internist to be able to accept many of the clinical observations which were offered and which tended to show the development of clearly organic disorders as a result of a disturbance in the psyche. Adler's approach to the psychoanalytic problems is admirably calculated to break down such prejudices.

In this book, however, the working out of the significance of the various neurotic character traits has been by ringing the changes on the basic formulation of what Adler calls the masculine protest. It is as if the neurotic said to himself, "I wish to be a complete man." This protest arises on the basis of a feeling of inferiority and an effort upon the part of the neurotic to correct this feeling, which he does by so ordering his life, so regulating his every act that he may find that security`of which the feeling of inferiority has robbed him. This is the fictitious goal of the neurotic and the fundamental and ultimate cause of his symptoms when he is no longer able to succeed, when failure threatens in his efforts to deal with reality.

For Adler the neurosis or the psychosis is comparable to the work of art, but has been built up in response to a fictitious goal which collects and unites into a group those psychic elements of which it can make use, collecting only those which promise results in the effort at the attainment of security. The attempt to attain to the maximation of his ego fails because directed along a false path. The neurosis or psychosis is therefore a constructive creation, a compensation product, which, however, fails because of its false direction.

All this is very psychological and does not bear out what I have said about it to the effect that Adler's approach is from the organic side. This particular book, however, stresses the psychological formula. In his earlier work on organ inferiority the organic basis of this psychological formulation is founded. The feeling of inferiority, which underlies the masculine protest, has its *raison d'être* in an inferior organ.

In this work he has gone to considerable extent in working over the psychological characteristics of persons who have had demonstrably inferior organs, either clinically evident or showing up at autopsy. From this work he believes he has been able to show that the predominant traits of character are the result of an effort on the part of the individual to overcome a feeling of inferiority resulting from an inferior organ. Many examples might be given, and in fact they come within the ken of every one, which demonstrate the validity of this point of view. A classical example is that of Demosthenes, a stammerer, who became the greatest orator of Greece. Adler believes that defects of this sort nucleate so to say, the feeling of inferiority and force the individual to make supreme efforts to overcome his particular defect and in this way, as a result of these efforts, the inferior organ, by the development of a highly differentiated nervous superstructure, may actually become supernormal, a result which we are familiar with, for example, in the remarkable facility with which blind people gain information through their supersensitized touch organs. In other words, to use the language of current psychoanalysis, the organ inferiority is the basic factor of what the Freudians refer to as the conflict.

These two works of Adler's, therefore, give the organic basis and the psychological elaboration of his opinions. The neurotic constitution founds in an inferior organ, the inferior organ produces a feeling of inferiority, the feeling of inferiority—the masculine protest—becomes the fictitious goal of the neurotic, whose symptoms result from an effort to mould reality along this false pathway.

To those who follow Adler through the various ramifications of his hypothesis, who read sympathetically his numerous case reports which he offers to substantiate his views, there can be no doubt but that the angle from which he looks at the problem of the neuroses and the psychoses lets us see new aspects of these phenomena which are exceedingly helpful to us in our effort to grasp their meanings. It will also be perfectly evident that the helpfulness of the Adler theories is in the orientation which the physician gets toward the problem presented by the patient, whether he approach it from the point of view of the internist or of the psychologist. Adler's theories are admirably calculated to help the internist to grasp the possibilities of organ inferiority as they may affect the psyche and to help the psychoanalyst to grasp the origin and meanings of the neurosis as he sees it at the psychological level and perhaps to see more clearly upon what his limitations are based. In any event the two groups of physicians, heretofore separated all too far, both on theory and practice, may find in Adler's views a common ground upon which to meet.

William A. White.

Abnormal Children (Nervous, Mischievous, Precocious and Backward). A Book for Parents, Teachers and Medical Officers of Schools. By Bernard Hollander, M.D. New York: E. P. Dutton & Co., 1916.

There is sufficient interest among parents and teachers at the present time to warrant the success of any book on this topic, provided it contains material previously inaccessible and offers practical therapeutic advice. Unfortunately this volume does not meet these requirements. It consists of scientifically inexact and sketchy descriptions of atypical children and adolescents, and the meagerest amount of vague advice. Clinical pictures that are accurately given are so commonplace as to be familiar to the reader already. The book is full of *ex cathedra* medical opinions, that may succeed in the physician's office, but can hardly stand the criticism of psychiatrists. It would be futile to enumerate examples of this, but we may mention that Hollander appears as an advocate for "maternal impressions" and phrenology, making such appalling statements as that the forward part of the brain and skull grow with mental exercise. The therapeutic part of the work is totally inadequate, consisting of such advice as that the child should be trained away from his tendencies, and that "psychotherapy" may be used. The latter seems to be confined to suggestion, for which no directions are given.

A treatise such as this, coming from one who holds a responsible scientific position, is unfortunate as it must tend to fix the layman's belief that nothing is known scientifically of the problems discussed.

John T. MacCurdy, M.D.

SLAVERY OF PROSTITUTION: A PLEA FOR EMANCIPATION. By Maud E. Miner, Secretary, New York Probation and Protective Association. The MacMillan Company, 1916.

Prostitution is a problem for every profession and a new book which presents a clear, temperate discussion of any of its phases is certain to be welcomed by the social worker, the criminologist and the psychiatrist interested in the mental factors which underlie conduct disorders. It is doubtful if any one in this country is as well qualified as Miss Miner to deal with the valuable material out of which this work is constructed. As probation officer in the night court for women and as the executive officer of an association engaged in most useful and practical work for girls, Miss Miner has had an opportunity to observe many different phases of prostitution and to gain unusual insight into the personal problems presented by thousands of individual prostitutes.

No one can read this book without being deeply stirred by the preventable wreckage of human lives which so much of prostitution represents. Again and again it is possible to see in the cases cited by Miss Miner how timely interventions of a sort readily available in every community might have averted the tragic consequences which grew out of relatively simple situations. The skill and resourcefulness displayed by experienced workers in such agencies as that directed by Miss Miner result in successes which seem almost incredible to those who have seen prostitution dealt with only by the crude methods of the criminal courts but, back of the hopeful phases of such work, is seen the dark picture presented by the complex mechanism by which prostitution seems to be woven into the very fabric of American cities.

Miss Miner's book is based upon a study of 1,000 prostitutes. A few general facts are of such interest that it seems desirable to mention them before considering a phase of prostitution which deals more particularly with problems allied to those of mental hygiene.

Three-fourths of the girls and women were of foreign birth; one-fifth were of American birth with native-born parents and the rest were native-born with one or both parents of foreign birth. The American girls with native parents came, for the most part, from poor homes in the rural districts of various parts of the country. Fifty per cent of the thousand cases were between sixteen and twenty-one years of age, many had taken the first immoral step at the age of sixteen. One-third entered prostitution between the ages of sixteen and eighteen. The generally low standard of education shown was due in part to the high percentage of girls of foreign birth but it is strikingly evident in all groups. A large majority were unskilled and underpaid wage earners. Most of these women began to work at the age of fourteen or even before, indeed, the foreign girls had often begun still earlier. Over fifty per cent were employed in factories or in domestic service. "The average wage of

170 domestic servants, exclusive of board and lodging, was $3.69 a week. Seven untrained nurses and hospital attendants were paid an average weekly wage of $5.35. The wages of 354 girls employed in factories, laundries, stores, offices and telephone exchanges, averaged $6.35. Sixty-five per cent of the factory workers had received $6 a week or less. The wages of employees in stores ranged from $3 and $4 a week paid to cash girls and bundle girls, to $12 a week to demonstrators. Thirty-one theatrical and other professional workers whose wages were comparable received from $6 to $65 a week."

The reasons assigned for immorality and prostitution were as follows:

"Influence of procurers	256 or 25.6 per cent
Conditions at home	210 or 21.0 per cent
Amusements and bad companions	187 or 18.7 per cent
Personal reasons	177 or 17.7 per cent
Economic or occupational factors	170 or 17.0 per cent."

Other facts of equal interest are given by Miss Miner and her thoughtful discussion of possible preventive measures should be read by everyone whose work is in contact at all with this great problem.

The mental factor which seemed in this study to be most prominent was feeblemindedness. About one-third of all the cases were regarded as feebleminded while others were thought to be mentally retarded but not to such an extent that protection was required for this cause alone. In 247 cases, psychopathological hereditary factors such as alcoholism, insanity and feeblemindedness were ascertained. That a large amount of prostitution is due to feeblemindedness has been demonstrated in studies conducted in widely separated cities. Just how large this proportion is no one can say from the data available for nearly all—as in Miss Miner's cases—depend upon observations made in the case of those who are unable to follow their dangerous calling without coming into the hands of the public authorities. If as much prostitution is clearly secondary to other definitely ascertainable and manageable causes as that depending upon feeblemindedness, there is very urgent need indeed for determining these causes and the ways in which they operate. The best examples of prevention are those afforded by preventive medicine and this is the procedure of preventive medicine. Such information as that presented in this book is absolutely essential to the success of attempts to apply the methods of preventive medicine in this field. One cannot help feeling that the relative ease with which feeblemindedness is determined and the relatively simple means by which it can be dealt with if sufficient institutional provisions exist tend to obscure other mental factors in conduct disorders in general and in prostitution in particular. It would be an exceedingly valuable piece of research to study a group of prostitutes by the methods of modern psychiatry which enable us to consider the individual as a whole and which throw so much light upon the relation of the affective side of mental life to conduct and character formation.

MORRIS J. KARPAS, M.D.

ONE MORE CHANCE. An Experiment in Human Salvage. By Lewis E. MacBrayne and James P. Ramsay. Small, Maynard & Co., Boston, 1916.

In the minority report of the Committee on Probation and Suspended Sentence of the American Institute of Criminal Law and Criminology, Judge Backus of the Municipal Court of Milwaukee, Wisconsin, says: "Carefully compiled statistics show that under the old system when first offenders were sent to the penitentiary or reformatory institutions, in a period of five years after serving their sentence from twenty-seven to forty-one per cent were returned to court on their second offense, showing that the penal institutions have not been the best corrective methods so far as the individual is concerned. The probation system has almost reduced this to a minimum, during a period of five years the return to the court being little over three per cent." Such expressions from a judge concerning the value of probation ought to gain wide and enthusiastic recognition for that procedure.

In the little volume before us we have an extremely interesting recital of the experiences of two probation officers covering a period of about fifteen years. The account is given in a simple, frank and apparently unprejudiced manner and whatever opinions the authors express concerning the subject of criminology deserve respectful attention, as they are based upon years of contact with and unbiased study of the offender.

Since the book is made up largely of a recital of case histories, it is difficult to present its contents with any degree of adequacy in a brief review. In order to be fully impressed with this chronicle of human salvage, we must read the book from cover to cover. Attention, however, might be drawn to the impressive statement that of the three thousand cases that came under the observation of these probation officers, fifty-five per cent have been permanently saved and have remained good citizens. Another ten per cent have earned a fair rating. They have kept within the law but have not become constructive citizens.

One doubts very much whether there is a penal or reformatory institution in existence which could present a record such as this. It certainly does not seem possible when one remembers that at least every third prisoner admitted to Sing Sing has been there or in some other penal or reformatory institution on one or more occasions.

The chapter on "The Boy Whom Probation Does Not Save" is particularly interesting, as it touches upon some of the fundamental factors of causation. An intelligent man with an experience of some fifteen years as probation officer can hardly be considered a layman in criminology.

Nevertheless, the authors of this book have not had any formal training in psychology and their recognition of the fact that mental disorders or defects are responsible for a tremendous percentage of incorrigibility is extremely interesting. Faulty home surroundings are mentioned as a close second cause.

To those who are really interested in solving the problem of anti-social behavior, this book is certain to bring much optimism and renewed encouragement for work in this most important problem of modern society.

BERNARD GLUECK, M.D.

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Sworn to and subscribed before me this 21st day of March, 1917.
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MENTAL HYGIENE

VOL. I JULY, 1917 No. 3

EDITORIAL

PSYCHIATRISTS, neurologists, psychologists and nurses in all parts of the country have laid aside for the time their civil duties and have taken their places in the military forces of the government. A big task confronts them. In no previous war have mental and nervous diseases risen to such proportions. Upon the specialists who enter the military service will rest the responsibility of stemming the tide by eliminating from the armies those who are obviously unfit for military service because of neuropathic or psychopathic conditions and of restoring and conserving for future civil usefulness those who, in spite of preliminary precaution, enter the army and prove unable to withstand the rigors of service.

The problems that will face the students of nervous and mental disease in the army will be many and intricate. The clinical problems will not be new except in their military setting and in their magnitude; but these factors will give rise to many complexities. It is important, therefore, that there be available for these students the latest information in regard to nervous and mental disorders in war. The present number of MENTAL HYGIENE has been planned to meet this need. On this account the material in this number must of necessity be somewhat more technical than the editors have planned to present in this magazine. If the information regarding the mental problems of war which has been gathered and is here presented will help those who are to carry the resources of psychiatry, neurology, psychology and mental nursing into the army and navy, we feel that such a departure in policy is amply justified.

MOBILIZING THE BRAINS OF THE NATION

STEWART PATON, M.D.
Member of National Research Council

WE are face to face with a great crisis, not national but world wide. Forces are at work which are stirring our civilization to its foundation. We can not predict to what extent we shall be successful in meeting portentous issues. One thing, however, is certain in view of the great revolution taking place against autocracy, and that is that every effort must be made to mobilize the brain power of this nation so we may be brutally efficient in war now with the object of becoming humanely efficient in peace.

Sentiment if not carefully guarded by intelligence will result in defeat in battle, and will prevent us from repairing the damage done to our civilization. We should also be prepared to observe every precaution necessary to prevent human energy from being dissipated; and should resist the temptation to conceal under such euphemistic terms as "charity" or "correction" the evidences of our neglect to organize for a constructive campaign of preparedness for living. Both these words cover a multitude of sins of omission, and in spite of the shock the realization of an unpleasant truth may cause us, it becomes evident, upon reflection, that their presence in our vocabularies is equivalent to an apology for not having squarely faced the great problems connected with living. Instead of waiting until we can be "charitably" and "correctionally" disposed towards the evils which have befallen us, let us frankly confess that if greater intelligence had been exercised, many disasters would not have occurred.

The proposed plans for the mobilization of our national resources is excellent as far as it goes. The co-ordination of commercial, industrial and military resources has become immediately necessary. Practically little has been done so far to co-ordinate and increase our information of the methods available for the control of the brains which are to direct this enormous undertaking. Twelve years ago I took occasion to suggest that if, as Lockyer said, "A struggle has begun in which science and brains are to take the place of sword and sinew," it would seem that "some concerted and well directed effort be made to find out the most efficacious way of increasing the brain power of the nation."

Unfortunately, the sword has been drawn again and the brains of human beings are being subjected to the greatest strain ever placed upon them and yet little attention has been devoted to protecting the functions of these organs.

It is unnecessary to recall the high rate of incidence of nervous and mental disease occurring in this country before the present disaster visited us. Think of the State of New York devoting to the care of the insane one-third of the sum allotted to cover its expenses, and then not being able to make adequate provisions for those afflicted with these disorders. Add to this list the number of those suffering from functional nervous disorders, as well as the army of unfortunates who are so decidedly anti-social in their behavior that their activities have to be carefully supervised and restricted, and the figures become appalling. What a comment it is upon our intelligence that we have to wait for the kind of evidence which carries an unwelcome sense of conviction in much the same way as an *argumentum ad hominem* does in order to appreciate the necessity for making adequate provision to study these shocking and preventable conditions.

If the predicament we should have faced squarely before the war began was of such a serious nature, what can we say about the changes that have taken place since August, 1914? Consider, for example, the rapid rise of nervous and mental disorders among the soldiers. Among the Canadians these diseases now represent over ten per cent of the total casualties. These figures, however, give us only a faint conception of the task imposed upon us, first to win this war and then to assist in restoring conditions favorable for sane thought and action. Do we need any more evidence to show how necessary it is to study the human machine and to be well informed in regard to the laws governing its activities? If this knowledge was urgently needed in times of peace, is it not imperatively demanded as soon as the added stress under which it is now working is recognized? Emotions are keyed up to a new high pitch. Extraordinary demands are made upon human ingenuity, upon the capacity to repress the feeling of individuality and to substitute for it the desire of social co-operation, to form the habit of thinking quickly and to the point, and to act with promptitude and fortitude. To change one's own habits of thought and action is no small task, but to change those of a nation is a prodigious undertaking, the ultimate consequences of which can not be foretold.

We cannot, without sacrificing conditions essential for the preservation of personal and national sanity, hide the fact that many of the attempts made to face the actual issues of life are at the best half-hearted efforts; while the recognition of critical situations or events is interfered with by the tendency to compensate for defects in perception by introducing a vague mysticism. While in this perplexed state of mind, unsatisfied secret longings drive their possessors to take refuge in the imaginary world created by wishful thinking. Let us begin by facing the world, not as we imagine it to be in our dreams nor hope it may become, but as it is today. As soon as our eyes are opened wide enough to see the realities of everyday life, we are struck instantly by the prevailing ignorance of the biologic laws regulating the personality. Only after a disaster threatens shipwreck—personal, national or racial—do we seek for the knowledge which, if properly utilized, can save us.

It is high time for us to realize that success in the great struggle upon which we have entered, depends not alone upon guns, but most of all upon the brains of the men behind the guns. If this principle is true for the organization of society for the successful prosecution of war, a still more complex organization is required to win the victories of peace. If we are genuine friends of peace, it is incumbent upon us to prepare for a more efficient and intelligent organization of social forces than is demanded for the successful prosecution of the war.

Momentous issues are at stake, and the solution of the difficulties depends upon the answer given to one question: can human energies be directed intelligently? This is no time for quack remedies, or for temporizing with opportunistic measures. We need to go to the root of the trouble and get accurate information as to the structure and function of the machine we are trying to operate. How do we expect to control temperament and character if we are ignorant or indifferent in regard to the nature of the biological mechanisms regulating temperament and character? In order to accomplish our purpose, it is obvious we should begin, not end, by studying living human beings, by training ourselves to become capable of observing their behavior, by recording the manner in which they respond to changes in environment, by discovering the laws regulating feeling, thinking and acting, and then try to ascertain to what extent failure and success in living are the results of ancestral or inherited qualities. When this information has been gathered or collected, we may apply the principles to the practical regulation of conduct. To adopt any other method of procedure has already proved to be detrimental rather than progressive.

It requires both courage and intelligence to face the fact that comparatively little is known of the laws governing human behavior, but when once the admission is made, then it is our first duty to accept the privilege of working hard to add as rapidly as possible to the present stock of information. We have tried to navigate the sea of life without chart and without compass. The priest has told us what men ought to become, the poet has recorded his dreams of an idealized race, while the historian has given us interesting pictures of what human beings were supposed to have been; but man as he actually is, has only recently become the subject for study. The present catastrophe which threatens civilization is one of the tragic results of attempting to organize society in order to satisfy theoretical conceptions without taking cognizance of the fundamental laws that govern human nature. If we had been familiar with the biologic mechanisms controlling the personality, we might have been alive to the danger lurking in any conception of duty which carries with it the idea of "special dispensations of providence," or missions to perform for which others are unfitted. Perhaps we might have had the satisfaction of knowing that rational methods had at least been suggested to abate the rancorous and contemptuous hatred associated with the growth of the Pharisee's idea about the value of his own possessions. We have learned through the bitter experience of the past few years that manic boastfulness, blind assumption of intellectual superiority may develop rapidly out of such apparently harmless foibles of character as occur when a nation is disinclined to recognize the importance of trying to see itself as others see it. If we had been familiar with the dangerous tendencies associated with the emotional reactions responsible for an exaggerated egotism, we should have been quick to recognize the accumulation of high explosives in the German character. When the spark was struck, the presence of powder was as much of a surprise to those who kindled the flame as it was to the stupefied onlookers.

There are other traits of temperament and character which occasion surprise as soon as we try to trace their genesis. The articles of faith of pacifist and Prussian militarist, for example, seem upon casual investigation to represent opposite poles, but as a matter of fact the underlying emotional trends and superficial intellectual currents in both cases have their sources in practically the same dangerous egotism. The alienist appreciates how quickly the radical mystic may be quickly transformed into extreme materialist, or the process may be reversed. When the full truth about the personality is known, it is often much stranger than fiction. The "conscientious objector" under slightly different conditions may become the fanatical persecutor. Many of the persons who in a great crisis like the present one promulgate the doctrines of non-resistance are preparing a series of half-repressed emotional reactions which later may not only reduce the level of their intellectual activity but may make it exceedingly difficult for them to maintain the rational control of their own behavior—a difficulty Hamlet appreciated. If we tried to regulate life by the principles laid down in "Why Men Fight" (Bertrand Russell, Century Co., 1917), we should be forever crying peace without attaining it. The professional pacifist and the Prussian militarist are about equally resentful when facing the loss of personal prestige, and in these reactions and not in their expressed opinions do we find the correct measure of the forces giving shape to their personalities. The advocate of the doctrine of non-resistance, and the champion of the settlement of all claims by force are both seeking for the freedom from the feeling of personal restraint which is expressed often in an apparently impersonal phrasing as "complete independence of class and party and creed."

The focussing of forces apparently innocuous but involving a mystical conception of both culture and duty resulted in the formation of the dangerous obsession by a nation which was the aggressor under conditions of great emotional stress becoming convinced that it had been attacked.

The final and satisfactory explanation of the present war will come not from the diplomatist or historian, but from the investigator who is engaged in trying to determine the forces regulating and preserving the balance of the human personality. Civilized nations have contributed generously in the past to facilitate the exploration of unknown lands and to find the sources of great rivers. The time has come to assist investigators in locating the sources of the streams of human energy in order that their volume may be estimated and their currents charted. We have lived on the banks of these great rivers, idly dreaming about the possibilities of their origin and the strength of their currents, but have made no provision for protection against floods which have overflowed the banks until we were forced by disaster to repair the damages and get rid of the signs of devastation. Is this not the time to quit ourselves like men and desist from referring to our delayed and spasmodic efforts to make reparation for the damage resulting from our lack of foresight as acts of charity?

Let us see now if it is not possible to get a glimpse of the chief problems relating to human life from an angle which will facilitate their formulation, and at the same time enable us to see the close dependence of the various factors concerned. Life has long been recognized as a process of adjustment. The range of successful adjustments varies in human beings all the way from the plane which is on the level with the activities of the lower animals to the mark reached by the man of genius. The degree of successful adjustment attained depends upon a number of different factors; first, upon the conditions existing within the human machine and then upon those without, collectively described as environmental. At this point we shall not further complicate the statement of the problem by trying to distinguish between the part played by environment or heredity in supplying the forces to run the machine.

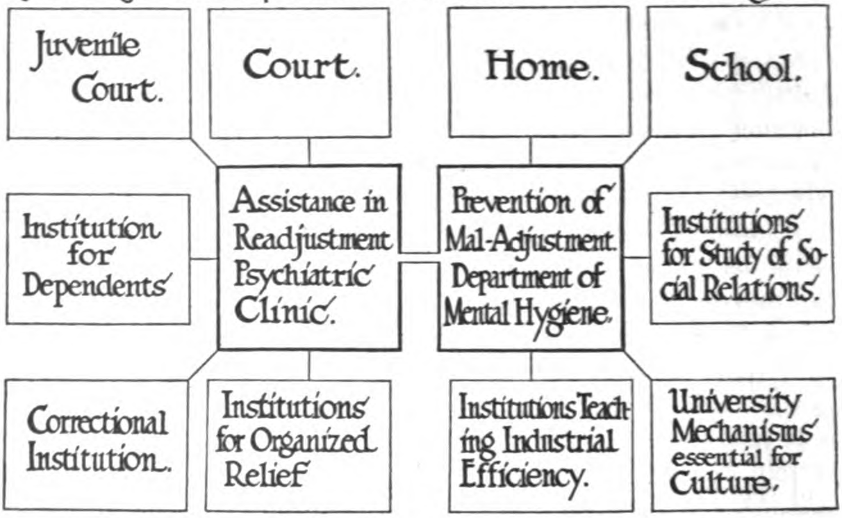
In the study of the mechanisms of adjustment, we may take advantage of the analyses of temperament and character made for us by disease. Various accidents may happen to impair the adjusting capacities of the machine, physical disorders may reduce the functional efficiency of one or more organs, with the result that the entire machinery is thrown out of gear. Complex conditions which we do not understand may arise interfering seriously with the capacity for successful adaptation. When these difficulties become apparent in maladjustments taking place in the higher levels of the conscious life, we are accustomed to refer to the condition as a mental disorder, while those occurring at lower levels are said to be signs of physical disease. The artificial distinctions supposed to separate the different levels have been created by man's ingenuity. One important practical test giving an accurate gage of the success attained in adjustment at the higher planes, is the willingness to face critical situations in life fairly and squarely. An inclination or a decision to dodge an important issue is evidence of failing adjustment. The conditions we call nervous and mental diseases are symptoms of a person's unpreparedness to face the critical situations arising in the environment where he or she has been forced to live. What to the uninformed person seems to be a chaotic condition expressed in delirium, or in a long chain of insane ideas, is a marvelously well ordered attempt upon nature's part to readjust the personality while under fire and to make some sort of compensation for an unwillingness to face a crisis.

The recognition of even these few biologic principles will, I think, be of great service to us when we begin to formulate ideas for mobilizing the brains of the nation. In developing the plan we should avoid committing the same mistake which has retarded progress in the past and consists in seeing only part of the problem. Man unfortunately formed the habit of trying to study himself piecemeal and failed to take account of the behavior of the machine as an active living organism. Now we realize it is necessary to develop a technic for the study of human character. Man has been so absorbed in trying to discuss life in abstract terms that he actually forgot to inform himself even as to the principal events taking place in the life of any one person in the effort to adjust successfully to meet the daily needs. This peculiar mental attitude has been particularly unfavorable for the development of our knowledge relating to human behavior. Instead of dealing with concrete situations as they arose in life, we have vainly attempted to draw inferences from the hypothetical conduct of imaginary beings that would be of service in settling the problems created by our existence. This point of view has also been responsible for the dissipation of a great deal of energy in formulating plans for social organization. The question of human behavior was not seen in perspective and, therefore, no opportunity was given to the investigators in different fields to appreciate that they were studying only the special phases of one great problem. We are only just beginning to recognize that the knowledge useful to parents in training their children, to the social worker, judge, student of criminology, educator or alienist, as well as other persons engaged in trying to assist people to secure better adjustments and thereby increasing the success and happiness of living, is part of a common store based upon the recognition of the laws governing human activities.

We should aim to look at all the problems connected with living from a broad, biologic point of view, and refuse to accept the artificial distinctions often made to facilitate the investigation of certain problems as in any way representing specific differences in function. We cannot understand intelligence if it is considered as distinct from emotion, nor emotion apart from the simpler reflex activity, nor the functions of the nervous systems arbitrarily separated from the activities of other organs and the responses of the entire organism as a unit. The appreciation of the value of this principle has a definite, practical application. We find, for example, that there is a tendency among some investigators to believe that the higher forms of adaptation represented in the so-called conscious levels can be intelligently studied or understood without reference to the activities in the lower planes. A great deal of harm has already been done by assuming it is possible to isolate the functions of the brain and nervous system and study them without considering their dependence and relations to other organs. This is a great mistake and we should carefully guard against the serious consequences which may be precipitated by failing to recognize the mistaken conception. No one can interpret human behavior correctly who is not familiar with the various parts of the machine. One must know something about the manner in which they are related to be competent to analyze the nature of the reciprocal activities when expressed in thought, word or action.

In view of what has been said, the question may be asked, how may we proceed to organize existing social forces with a view to intelligent action that will safeguard society against the needless reduplication of institutions and the wasteful expenditure of human energy. In the accompanying chart an indication has been given of what may be accomplished in the way of giving practical expression to the ideas already mentioned. As social organization is concerned with the intelligent direction of human behavior, let us begin by making human behavior the chief object of inquiry, and then see whether when starting out from this center it is not possible to co-ordinate a great many existing institutions which often seem to be unrelated. At present we are in a better position to assist a person to readjust life when behavior is disordered as the result of disease, than we are to prevent the occurrence of maladaptations. In every city the courts, juvenile courts, institutions for dependents, correctional institutions and institutions for organized relief, group themselves very naturally about the only center in which the methods are taught

GENERAL PLAN OF ORGANIZATION TO FACILITATE THE STUDY OF HUMAN BEHAVIOR.
(Preventing needless reduplication of Institutions and waste of energy.)

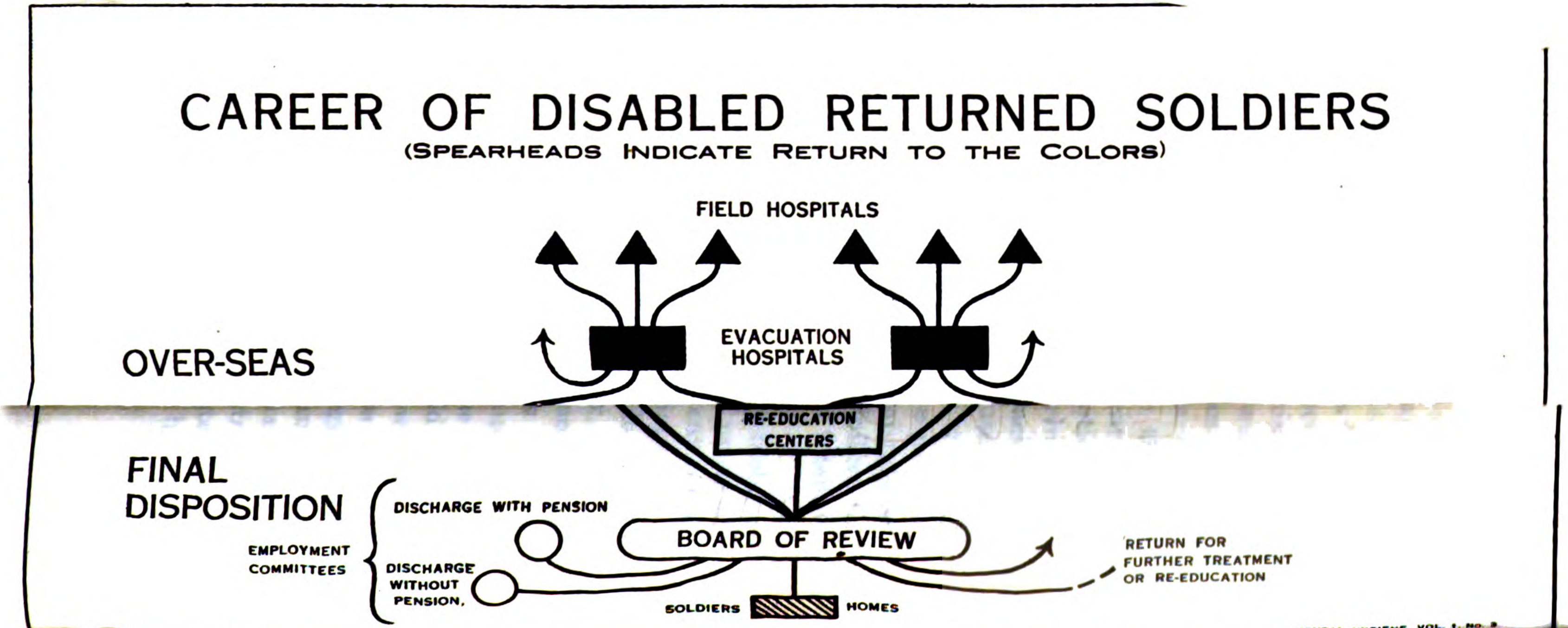

Juvenile Court.
Court.
Home.
School.
Institution for Dependents.
Assistance in Readjustment Psychiatric Clinic.
Prevention of Mal-Adjustment. Department of Mental Hygiene.
Institutions for Study of Social Relations.
Correctional Institution.
Institutions for Organized Relief.
Institutions Teaching Industrial Efficiency.
University Mechanisms essential for Culture.

for the study of human behavior—namely, psychiatric clinics. It will be a fortunate occurrence for civilization when those who are engaged in these institutions in the study of different phases of human behavior recognize more keenly than they do at present the common bond of union and the common purpose which should unite them in carrying on their work through this center. History once again is repeating itself and we pass from the study of disordered conduct to the so-called normal activities. The human interest is at first stimulated by the tragic incidences of life, disease, insanity, poverty and crime; and then there comes later the desire to prevent these unfortunate conditions. Preventive medicine has already accomplished a great deal in safeguarding us from the ravages of disease, but, unfortunately, no well planned and co-ordinated effort has been made to prevent the maladjustments in the higher levels of activity, marked by disordered feeling, uncoordinated thinking and irrational conduct. The next important step in the right direction will probably be marked by the establishment of a university department of mental hygiene closely associated with the work carried on in the psychiatric clinic. As a matter of fact, these two departments, the psychiatric clinic and the department of mental hygiene, are not actually separate institutions although recognized as such merely in order to facilitate organization. The establishment of an institution of this character would indicate the existence of an appreciative regard for the scientific study of human behavior and would be a rational step in the impending re-organization of society. Incidentally a Department of Mental Hygiene would be a tribute to the memory of the remarkable Frenchman, Pinel, who in 1798 declared that "Medicine should form the basis for all public instruction." He was not satisfied with charitable endeavors made with the purpose of alleviating the misery and suffering of human beings when he saw it was possible to prevent disaster by training persons to be competent to guide the machine before its mechanisms had been hopelessly impaired by the injudicious handling of ignorant amateurs and thus prevent disaster. When once this action has been taken, we should be in a position to offer opportunities for giving instruction to teachers in the art of studying the human personality, and to convey to them some idea of the biologic methods available in acquiring information as to the dispositional trends of both temperament and character, and to call attention to the special knowledge and skill required in directing these to the best advantage. Some day we shall awaken to the importance of the tragic results connected with placing persons ignorant of the laws governing human behavior in control of our educational system. Scholastic conceptions of education are now exacting a tax from our civilization represented by a degree of misery and inefficiency, and a wastage of human energy that is far greater than any one imposed by war. My experience in the examination of students in schools and universities has convinced me of the feasibility of training teachers to recognize the signs of imperfect adjustments, particularly those of the emotional life, which if not corrected, lead quickly to loss of intellectual interests, the anæsthetic effects of chronic failure, the unwillingness as well as unpreparedness to fill any critical situation, the substitution of impulses for voluntary activities, and the subsequent disappointments leading to a series of acts which later may become the cause for admission to the court, prison, sanatorium or hospital for the insane.

In a brief compass, it is not possible to enumerate even the more important results which would follow the recognition of the principle requiring those who assume the control of any form of human activities to be familiar with the machine, its functions and the relation of its parts. Culture would be interpreted in a new and broader sense. Much more attention would be given to the study of the methods of preparing the mind to be capable of knowing what "the best that has been thought and said" is. A cultured man would be recognized as a person who was familiar with the means of keeping the mind free from overvalued ideas, from definite obsessions, from the dangerous and explosive reactions associated with an exaggerated egotism and who was emotionally prepared both to cultivate intelligent sympathies and to resist the insidious influences of wishful thinking. The scholar who grasped these principles would quickly recognize the impossibility of cultivating a well balanced mind if the fear of the practical was tolerated or the desire to gratify a monastic sense of seclusion and aloofness was encouraged. Culture thrives best when established upon a consciousness of success in facing the world and rapidly degenerates when linked with a sense of inadequacy calling for a partial withdrawal from the real world to a world created by autistic thinking. In a republic, we need to be continually on our guard lest scholarship make the mistake of assuming that the forced detachment resulting from failure to meet the actual conditions of every day life is a sign of intellectual superiority.

Eventually, as the result of insisting upon the value of biologic methods in the analysis of all forms of social, national or racial activities, we should be less inclined to promise permanent peace until something more is known of the actual conditions regulating the genesis of motives and impulses or limiting the sphere of voluntary control of actions. We should, however, become accustomed to considering the study of behavior of far more value for the promotion of peace than the interpretations of an exacting legalism. Peace congresses would encourage the accumulation of information in regard to human beings necessary for the rational control of conduct, and a rational peace propaganda would take the place of much of the maudlin sentimentality which now demonstrates the incompetency of neurotic persons to discuss international affairs intelligently as they show such a startling degree of inability to solve their own personal problems, and are anxious to symbolize this sense of inadequacy in dreams of universal peace.

It is an opportune moment for democracy to demonstrate that the successful control of human energies can be entrusted safely only to those persons who understand the mechanisms by which life is adjusted.



CAREER OF DISABLED RETURNED SOLDIERS

(SPEARHEADS INDICATE RETURN TO THE COLORS)

FIELD HOSPITALS
EVACUATION HOSPITALS
OVER-SEAS
RE-EDUCATION CENTERS
FINAL DISPOSITION
DISCHARGE WITH PENSION
EMPLOYMENT COMMITTEES
DISCHARGE WITHOUT PENSION,
BOARD OF REVIEW
RETURN FOR FURTHER TREATMENT OR RE-EDUCATION
SOLDIERS
HOMES

THE CARE OF DISABLED RETURNED SOLDIERS

PEARCE BAILEY, M.D.
Chairman, The Mental Hygiene War Work Committee of the National Committee for Mental Hygiene

THIS country faces a military experience similar in certain respects to that which Canada has been passing through since the outbreak of the war. Canada has increased by 100 times its original permanent army and has sent three-quarters of it on the long overseas journey. The United States, like Canada, is suddenly called upon to assemble for foreign service, an army so large that its regular army is little more than a nucleus. The expeditionary forces of both countries must operate far from their home bases, but in these respects the United States is in a less favorable position than Canada, as by virtue of blood and government relationship all outbound Canadian troops disembark first in England and, returning home, find in England a refuge.

In the spring of 1915 ships began to arrive at Halifax and Quebec with soldiers invalided home, some with wounds but more with medical disabilities such as mental disease, tuberculosis, rheumatism, etc. Our troops must be returned even more promptly, for our Allies are in no position either to care for them or to feed them. In fact, the speed with which we evacuate and return home our invalids promises to be a certain measure of this country's real service in Europe. We must be prepared shortly after our troops have reached France to receive returned invalids as fast as ships can be found to transport them. What shall we do with them? It is important to note what Canada has done and is doing in a similar emergency.

During the summer of 1915 the Canadian government created the Military Hospitals Commission for the purpose of giving assistance to the army in caring for its returned soldiers who had begun to come home in great numbers. It undertook to do what the army was then in no position to do. It provided by voluntary subscription, loan, purchase and construction, hospitals and convalescent homes for disabled Canadian soldiers invalided home. It has now, either under construction or in actual operation, fifty-nine separate institutions.

A Canadian soldier, invalided home from overseas, who still needs treatment of some kind, is examined at the receiving depot at Quebec by a board of medical officers. This board has before it the medical records forwarded from England and recommends that the man be discharged or that further treatment be given him according to his condition. In the event of the soldier being found insane on arrival, he is sent to a special institution or to one of the provincial hospitals for the insane. Discharge without pension is given when the disability from which the man is suffering is not a result of service or has not been aggravated by service. If discharged, the soldier is given his arrears of pay to date, fifteen days' pay and allowances in advance, a suit of civilian's clothing, and free transportation to his home or elected destination, with full meals en route. He is also given a card of introduction to the secretary of the Provincial Employment Commission. If the Board of Medical Officers considers that a man's disability is such that he is entitled to a pension, his discharge is post-dated thirty days, and pay and allowance to the date of discharge are given to him. He receives also civilian's clothes. Those requiring further medical and surgical treatment—about two-thirds—are handed over to the Military Hospitals Commission and are sent to one of the institutions of the commission, the choice of institution being determined partly by the nature of the disability from which they are suffering, and partly by their place of residence. These men remain soldiers, subject to military discipline.

The medical service of the commission includes specialists in the various branches of medicine, and provides means of treatment by massage, electricity, hydrotherapy, vocational training and physical drill.

In order to provide for the discipline and pay of the men in the various hospitals and convalescent homes operated by the commission, the Military Hospitals Command was created as a part of the Canadian Expeditionary Force for home service. This command is under the direct jurisdiction of the commission. It is a link between the commission and the Department of Militia and Defense. Under its auspices special physical drills, which have been found of much value in the hospitals in England, have been introduced, with most beneficial results.

A very important part of the work undertaken by the commission is that which deals with vocational training during the period in which the men are undergoing treatment. The government has also arranged, through the Military Hospitals Commission, to carry out a system of re-education after discharge. The commission has appointed vocational officers for different provinces in conjunction with the Provincial Employment Commissions, which represent the provincial governments. Disabled Soldiers' Training Boards and Provincial Advisory Committees on Training have also been appointed. A Disabled Soldiers' Training Board consists of a member of the provincial commission, a vocational officer, and a medical man.

A soldier who has not been discharged and who is under treatment in one of the institutions operated by the commission, is entitled to the same pay and allowance as at the front.

Pensions are determined by the applicant's disability, without reference to former occupation. No deduction is made because of the pensioner having undertaken work, or because of his perfecting himself in some form of industry. This ruling has been found necessary in Europe as well as in Canada, as the invalided soldier does not co-operate in re-education or re-employment unless assured that his pension will not be affected thereby. When an invalided soldier is discharged and passed on for re-education, he and his family are maintained at the expense of the government. While he is receiving his training a special scale of pay and maintenance is allowed, which varies with the size of the family. In other words, the pension to which he is entitled by his disability is supplemented by a special allowance for such time as his training may occupy, the purpose being to have the man engage in any new occupation which, with his pension, will make him comfortable. But while he is learning that occupation, the government supplements his pension by providing for his family.

In facing its own problem of returned soldiers, the United States has still time to profit by the experience of other countries. These were forced to organize under a driving necessity, while we still have the opportunity, if we grasp it at once, of constructing a plan in advance which will ensure a far higher degree of therapeutic success than has ever been attained before, and which at the same time can be counted on to reduce the government's pension liabilities to its soldiers. The diagram which accompanies this article shows what seems to be a humane and practical program for meeting these new responsibilities.

We may assume that the United States will maintain 600,000 troops for service for one year in Europe, and that ten per cent of them, or 60,000 men, will be returned invalided to this country during that year. The following plan, while based on that assumption, is modifiable in accordance with the number of troops involved. The figures given in it are tentative, although they are sufficiently accurate to indicate how the different kinds of casualties will be distributed.

From overseas, the invalided troops must be returned home promptly, as it will be inadvisable, except for the treatment of those likely to be returned to the colors in a comparatively short time, to maintain large hospital bases in Europe. On the basis of 60,000 troops returned each year, there would be 5,000 a month, or a weekly transport of hospital ships carrying more than 1,200 invalids. During the voyage all papers should be made ready for presentation to the authorities at the port of arrival. On reaching port, a small number of the invalids would probably be detained in the quarantine hospital by reason of contagious diseases or of sudden and unexpected illness arising during the voyage. The bulk of the invalids would pass directly to the reception building of the examining station. This reception building must be extremely elastic, as, in view of the difficulty of transportation, ships could not be expected to arrive at regular intervals. The hospital division of Ellis Island furnishes an ideal situation and equipment for the examining station. The invalids would remain from three to six days at this point, long enough for thorough physical and mental examinations. The examinations would have the following purposes:

1. To determine whether the disability were actually acquired in the line of duty or whether, as is often the case, it had preexisted and had escaped observation during a hurried or imperfect examination for enlistment.

2. To determine the exact nature of the disabilities, as well as the personalities of the individuals.

These facts will be determined by medical men working in collaboration with laboratory workers, psychologists and social investigators. The medical men would consist of physicians, of general and special surgeons, of eye, ear, nose, and throat specialists, and specialists in nervous and mental diseases—say twenty. All would work in co-operation with a chemical and bacteriological laboratory and a department of social investigation. This latter would make psychological examinations of the invalid, would determine his vocational aptitudes, investigate his family, his previous civilian employment, the amount of remuneration he received before enlistment, and other details of this kind. Too much stress cannot be laid upon the importance of a thorough investigation of the social features which make up an individual's personality, and the changes wrought in it by the present situation. A knowledge of the soldier's attitude, to be again referred to, is essential to a wise selection of treatment.

3. The Examining Board would fix as a matter of record the exact condition of the individual at a stated time. This record would always serve as a check on subsequent claims for injuries said to have arisen from the war, but which were in reality due to other causes. "Substitution of origin," a common occurrence in all injuries for which compensation is claimed, would become impossible under a method which demonstrated constitutional defects at a given time. For example it would be impossible for optic atrophy to be accepted as an injury of war, if at some antecedent period a positive Wassermann had been recorded.

The reports of the examinations from the various departments would be forwarded to the Distributing Board, which would decide the next step for the invalided soldier. Of the 5,000 monthly arrivals, 1,600, or about a third, would be immediately discharged, with recommendations as to employment, with or without pension. A small number might be returned to the colors. There would be left approximately 3,400 listed as requiring treatment, the particular treatment being determined by the Distributing Board acting under the advice of the Examining Board. The Distributing Board should consist of three men of superior ability, one of whom should have experience in nervous and mental diseases.

The examining station is the central point of the whole plan, which is based on the therapeutic principle that diseases in bulk should be classified before they are treated, and that handicapped persons must be thoroughly understood before they can be advised wisely. Never before have medicine and kindred sciences been prepared to undertake the great task of the healing and reconstruction of incapacitated and enfeebled men. But they can succeed only if the different classes of cases are so divided that each case obtains the particular kind of treatment and environment necessary to it. It would be foolish to expect much of any treatment if the insane, the tuberculous, and the neurotic were indiscriminately herded together; and the lack of constructive success in this and other wars is largely attributable to the failure to observe this fundamental. If the categorization effected by the central clearing house is effective (and it can be made so), and if both disability and personality are accurately estimated, the various hospitals, clinics, colonies and re-education centers to which patients pass from the clearing house, promise to make soldiers' homes less conspicuous features in the landscape and to return to civil life a greater proportion than ever before of men able and willing to support themselves.

The highly diversified character of the disabilities created or brought to light during military life, requires a great variety of institutions for treatment. In addition to general medical and surgical hospitals, there must be convalescent homes for those enfeebled rather than disabled, sanatoria for consumptives, and colonies of various kinds at which outdoor work can be taken up, little by little. Vocational training is an important part of the scheme, especially for those whose disability forces them to find a different occupation than the one they had before entering the army. This feature involves questions concerning the soldier's personality, and also has associated with it such perplexing questions as the rating of pensions, attitude of trade unions, state versus federal supervision, etc. The nervous casualties require a high degree of differentiation in their treatment. The insane should be carefully segregated from those whose mental disturbances are susceptible of more prompt recovery—the hysterics should be kept by themselves, and special education centers will be found necessary for the care of the disorders of speech and hearing so frequent in this war.

It seems at first sight a staggering program. But there is no way of avoiding it if we send large numbers of soldiers to France, and there will be no less difficulty in meeting it if separate institutions are provided for the different classes of cases than if all are thrown into a common melting-pot.

As will be seen by reference to Table I, the invalids will arrive in such large numbers each month that each class of cases will more than fill any but the largest hospital. It is, consequently, evident that there will be no loss in economy by keeping the different classes by themselves.

It is obvious that the returned invalided soldier should be under military control up to and through the examining station. It seems extremely important that this control should persist

Table I.—Showing the number of cases per month which will require admission to classified institutions. Based on 40,000 undischarged invalid soldiers a year.

Gun shot wounds, shrapnel wounds, etc.	833
General cases—organic diseases—undetermined	400
Nervous and mental diseases	400
Eye, ear, nose, throat diseases	333
Bone, joint and muscle diseases (Arthritis, synovitis, certain deformities, ankylosis, stiff joints and rheumatism, etc.)	333
Heart and lung (not tuberculous) diseases	333
Tuberculosis	233
Amputations	200
Kidney cases	100
Gastro-intestinal cases Venereal and skin cases Special types—trench fever—gassing, etc. Disciplinary—incorrigibles, etc.	168

through continued treatment, and that, with the exception of those for the chronic insane and the tuberculous, all institutions should be under the command of medical army officers. The soldier has been so long sustained by discipline that he cannot afford to have this prop suddenly taken from him during convalescence from illness.

An invalid soldier's mental state presents certain resemblances to that of a person injured through the carelessness of someone else, or to that of an injured workman who, during the period of his disability, is entitled to be supported by some system of compensation. In all there is a feeling of indignation that their person has been violated, and a resentment toward the instrument through which the violation occurred. This feeling may not be altogether conscious to the individual, or appear in his speech, but becomes evident from his general deportment as shown by lack of earnest efforts to get well. Examples of this in civil life are numerous. In civil actions for personal injuries of a nervous character, those who seek redress through the courts must maintain a resentment through the long delay inevitable to legal procedure. If the resentment disappears, the symptoms go too, and thus vanish the hopes of a substantial verdict. Workmen's compensation acts affect the minds of injured and pensioned workmen in much the same way. They tend to arouse desires to "get even" or feelings in the individuals concerned that they are now entitled to be taken care of. They make disability more lasting than it would be if the injured person were under the compulsion of getting well as fast as he could. They tend to convert the normal desire to get well into a too keen appreciation of the advantages of staying ill. These same factors have to be considered in the treatment of a returned soldier, whether his disabilities be surgical or medical. In either case treatment has to be outlined with a view toward combating the idea that since the soldier has been injured through no fault of his own, he should be supported indefinitely by the country for which he has bled. He may be entitled to it, but the idea is not good for him.

In the past the pathos of the soldier's situation has obscured a clear vision of the rational way out of it. The sympathetic appeal wrought by sightless eyes, by empty sleeves, by strong men hobbling along on wooden legs, and the knowledge that men thus crippled have become so solely under the call of duty and stress of circumstances, has created a tradition that the country must first of all comfort these injured sons of hers. But long experience has taught that the best comfort and the truest compensation is more surely attained by a discipline which makes men help cure themselves than by an emotional and solicitous care. Men can only cure themselves by being prevented from "lying down" and by being taught to use such energies as they have left for their own reconstruction. An hysteric who sues for personal injuries, gets well after litigation is over. But for a pensioned man there is no such turning-point and, consequently, the natural tendency is for him to live on his pension without working. As long as he does this, nervous states will persist which cripple personal usefulness just as seriously as surgical injuries. The principle of the continuation of discipline, or obedience, regularity, and order during a treatment that may not always fall in with the soldier's personal inclinations, is imperative to the cure of the neuroses which form so important a factor in the disabilities of returned soldiers.

The final feature in the plan which has now been outlined is the creation of federal and state boards of re-employment, which shall meet the returned soldier at all points of discharge, and facilitate his return to self-support and independence in the civil community.

The problem, therefore, which confronts this country is definite. Provision must be made to meet what promises to be the greatest medical emergency we have ever faced. A commission appointed now, could in two or three months construct a plan which would provide for most of the contingencies. This commission would gather all the information accumulated from allied countries; it would secure, provisionally, the services of medical men qualified in the different specialties, who would accept commissions in the Medical Reserve Corps if called upon; it would accept or obtain options on the offers of lands, buildings, equipment, etc., now so freely tendered, and would survey them with a view to their specific usefulness. The saving to the government effected by such preliminary work could be counted in millions of dollars, to say nothing of the untold saving of human happiness and usefulness.

THE USE OF INSTITUTIONS FOR THE INSANE AS MILITARY HOSPITALS*

THOMAS W. SALMON, M.D.
Medical Director, The National Committee for Mental Hygiene

IN January 1915, when the pressure upon the Royal Army Medical Corps to provide additional hospital beds for wounded soldiers became acute, the Board of Control was asked by the War Office to co-operate in an attempt to secure 50,000 beds. All other government departments having institutions under their control were also asked to assist. The Board of Control formulated a plan whereby 92 county and borough asylums were to be divided into ten groups and one institution in each group vacated of its patients and turned over to the War Office as a military hospital. It was planned to provide in this way 15,000 beds or almost one third of the total number required. The methods by which this plan was put into execution were so thorough and expeditious that an account of how it was done may be useful to those who may be confronted with a similar task in this country if the fortunes of war should demand it.†

As soon as the plans of the Board of Control had been formulated a circular (Circular A—Use of Asylums as Military Hospitals) was sent out to all chairmen and clerks of Visiting Committees and all Medical Superintendents. A copy of this circular, a circular giving the observations of the War Office on the plan (B–Use of Asylums as Military Hospitals), and the letter which accompanied them follows:

A. USE OF ASYLUMS AS MILITARY HOSPITALS

Scheme, prepared by the Board of Control, for the general administration of vacated asylums, and the details of reimbursement which the War Office undertakes to make to receiving and vacated asylums.

I. *Charges arising from the maintenance and treatment of sick and wounded soldiers in Asylum Buildings, which the Army Council undertakes to meet.*

1. VACATED ASYLUMS
    - (a) Charges in connection with buildings and equipment.
        - i. Necessary adaptations of the buildings for hospital purposes.
        - ii. Maintenance and repairs of premises.
        - iii. Reinstatement of premises at end of occupation by Army Council.

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*Appendix 2 of the report to the Surgeon General.

†Very interesting articles by Lt. Col. D. G. Thomson (*Journal of Mental Science*, 62: 109–35, January 1916) and Major R. D. Hotchkiss (*Journal of Mental Science*, 63: 245–49, April 1917) give accounts of the measures taken in England and Wales to convert county

iv. Additional equipment found necessary: *e. g.*, hospital requirements, extra beds, etc.

Note:—All extra equipment purchased at the expense of the War Office which remains in stock at the conclusion of the war, is to be regarded as the property of the War Office, but may, if the asylum authorities so desire, be taken over by them wholly or in part at a valuation.

(b) Charges in connection with the maintenance of staff and of soldier patients.

- i. Salaries and wages, including fees to surgeons and other experts, and remuneration of other persons called in to supplement ordinary staff.
- ii. Victualling on scales laid down by Army Council.
- iii. Uniform for staff and clothing for patients.
- iv. Furniture and bedding. (Renewals and repairs.)
- v. Medicines, surgical appliances and instruments.
- vi. Fuel, lighting, washing and other necessaries.
- vii. Rates, taxes and insurance.
- viii. Incidental expenses, including travelling, burials, etc.

2. Receiving Asylums

Charges in connection with the maintenance of lunatics.

- i. Additional weekly cost of maintenance, if any.
- ii. Equipment and stores required for additional numbers and extra cost of maintenance and depreciation.
- iii. Any necessary slight structural alterations necessitated by increased numbers, extra wear and tear, and reinstatement of premises.

3. Cost of all Necessary Travelling and Conveyance of Lunatics

II. *General Arrangements.*

1. The War Office will be solely responsible for the medical care and treatment of the soldiers and the management of the hospital.

2. The asylums will be handed over as going concerns with the whole of their staff, medical, engineering, stores, farms, etc., and such part of the nursing and attendant staff not needed to accompany the patients to the receiving asylums. The portion of the nursing staff retained at the asylum should be that portion best suited to take up or assist in the care of the sick and wounded.

3. The War Office will appoint the additional medical and nursing staff required for the hospital. The visiting committee and the medical superintendent will generally, from their local knowledge, be able to suggest suitable persons for employment in addition to those already in War Office service.

4. Subject to the directions of the committee, the medical superintendent is the head and director of the asylum administration, and in most instances, no doubt, he will be appointed by the War Office to be the officer in charge of the hospital. If so appointed he will continue to exercise the general control over the institution and its staff and working, for which his experience specially qualifies him. The other medical officers of the asylum will ordinarily be qualified and willing to become part of the medical staff of the hospital, and to share the duties with the additional professional staff sent by the War Office.

5. The whole of the asylum staff is in the employment of the visiting committee by whom they are appointed and by whom they can be dismissed. They are in established pensionable service, and it is necessary that their asylum service should be unbroken, except for misconduct. If in any instance it is expedient that the head of the hospital should be an

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asylums into war hospitals and particularly of the conversion of the institutions of which they were superintendents, namely, the Norfolk County Asylum and the Renfrew District Asylum, respectively. In the discussion of Col. Thomson's paper (*loc. cit.*) other superintendents of institutions which had been converted into war hospitals gave their experiences.

officer other than the medical superintendent, it is desirable that he should delegate the lay administration of the institution to the committee which, from experience and local knowledge, is obviously the authority best qualified to carry it on. The medical chief will thus be relieved from many laborious administrative tasks. The delegation may be subject to such conditions as are thought reasonable.

6. The War Office has decided that military rank shall be conferred on the members of the medical staff. If an officer of higher rank than the medical superintendent is sent to the hospital, it is desirable that the general administration of the institution should be delegated to the medical superintendent, or at any rate in practice left in his hands. As regards the male attendants, it may be thought necessary, as has been done at the state institution at Moss Side, to incorporate them in the Red Cross organization.

7. The committee will continue to make contracts for supplies, and otherwise carry on the business side of the administration, will open a fresh banking account from the date when the War Office are in possession, and the clerk will each month present to the War Office an account, certified as the War Office may require, of the expenditure incurred. These accounts will be audited as heretofore by the asylum auditors with any additional precautions which the War Office may require. They should be transmitted to the War Office through the Board of Control who, after such enquiry—if any—as they think necessary, will append their certificate that the claim is a proper one to be made on the War Office.

The committee will be informed by the War Office what stores, etc., can be supplied by that department, and what must be contracted for locally.

The necessary funds to meet expenditure on structural alterations, additional equipment, expenses on travelling and conveyance, etc., will be advanced by the War Office as soon as a decision is reached that an asylum is to be vacated.

Claims for such advances should be transmitted through the Board of Control.

B. USE OF ASYLUMS AS MILITARY HOSPITALS

Observations by the War Office supplementary to their general confirmation of the scheme prepared by the Board of Control:

1. VACATED ASYLUMS
    (a) Charges in connection with buildings and equipment:
        ii. Maintenance and repairs of premises.

        In case of considerable repairs constituting permanent structural improvements, the Board of Control will no doubt be prepared to advise to what extent credit can be given to the War Department for these in the final settlement.

        iii. Reinstatement of premises at end of occupation.

        It is presumed that a complete inventory will be taken before occupation.

        iv. Additional equipment.

        It is presumed that complete accounts will be kept of equipment furnished by, or purchased at the expense of, the War Department.

    (b) Charges in connection with the maintenance of staff and of soldier patients:
        i. Salaries and wages.

        It is presumed that the visiting committee will actually pay (at War Department expense) the present salaries of the retained asylum staff, and any persons temporarily engaged, and that the War Department will pay direct its own officials. This is merely a matter of machinery, and will be pursued in the communication referred to in paragraph 7 below. The rates to be paid for any persons temporarily engaged will be settled by the War Office.

        ii. Victualling.

        Presumably consumable stores taken over will be valued and the cost credited to the asylum authorities.

It is presumed that appropriate accounts of consumables, etc., whether supplied by the War Department or purchased on their behalf by the asylum authorities will be kept, and that these accounts will be available for inspection, if desired.

Medicines and medical and surgical equipment when not taken over with the asylum will be provided by the War Office or under arrangements approved by them.

Receipts Generally.

It is presumed that the produce of asylum farms will be available for use, and that the War Department will be allowed credit for produce sold. Also the War Department will receive credit for the grants received by the asylum authorities in respect of any harmless patients retained for work on farms or grounds, since they will be maintained out of general maintenance of which the War Department is bearing the cost, and generally that any receipts arising out of the ordinary working of those institutions while they are in use by the War Department will be taken in reduction of the working expenses chargeable against the War Office.

2. RECEIVING ASYLUMS.

(i) Additional weekly cost of maintenance, if any.

It is presumed that the authorities of the vacating asylum will continue to draw their grants in respect of patients transferred and of patients who would be sent there but for War Department occupation, that the vacating asylum will pay to the receiving asylum the weekly cost of maintenance therein, and that the War Department will refund to the vacating asylum the excess in cases where their grant is less than the weekly cost in the receiving asylum.

In cases in which the weekly cost is less, this department would not propose that the saving should be taken into account unless the saving is of material amount, in which case the charge under (ii) below should apparently be abated.

(ii and iii) Equipment and stores required.

It is presumed that an account will be kept of the additional equipment, and that such equipment may be taken over on evacuation at a valuation as in case of vacating asylum. This department will readily fall in with your views as to the manner of payment for these services.

GENERAL ARRANGEMENTS.

(2) If a portion of the staff is transferred to a receiving asylum, it is presumed that the salaries will not be a charge for the War Department.

(3) After "nursing" in line 1, add "or other."

(4) After "War Office" in line 3, add "under the general officer commanding-in-chief of the command concerned."

(6) Delete the first three lines and substitute, "If the War Office in any given case should appoint an officer of senior rank to the hospital it is desirable that the general. . . ."

(7) It is suggested that when an asylum is taken over, an advance be made by the War Department on the recommendation of the Board of Control on the basis of a month's (or quarter's) estimated expenditure (plus initial costs in the first instance) and that periodical accounts should be rendered to the War Department through the Board of Control as suggested. A further communication will, however, be addressed to the Board of Control as regards the procedure in rendering accounts, but this department will be prepared to make advances as soon as desired.

"The Board of Control,
66 Victoria Street, S. W.,
10th March, 1915.

Sir:

I am directed by the Board of Control to transmit to you a copy, "A," of the scheme prepared by the board for the general administration of the vacated asylums, and the details of reinbursement which the board suggested the War Office should undertake to make to receiving and vacated asylums.

The board, on the 6th instant, received from the War Office a letter expressing the general concurrence of the Army Council with the detailed financial arrangements mentioned above. A statement was enclosed setting forth some minor points on which it appeared to the Army Council desirable to arrive at a clearer understanding, and on which they thought the statement might perhaps with some advantage be modified. It was also added that the actual details regarding staff requirements, technical equipments, and the like, will be settled by arrangement with the War Office in each particular case.

A copy of the War Office statement—marked "B"—is herewith enclosed. It is to be observed that on page 1, under "Receipts Generally" the view is entertained that the accounts of the farm at the vacated asylum would be included in those of the War Office. The board, however, contemplated that the asylum farms would be managed by the visiting committees; that the accounts would be kept separately from those relating to sick and wounded soldiers; and that supplies of vegetables and other produce to the hospital would be charged for at reasonable prices, say current market rates, and would be debited to the War Office account. Inasmuch as many of the farms are big enterprises with considerable stock (both live and dead) the board think that this course would be preferable and generally more equitable than the alternative of including the entire farm accounts in the accounts for soldiers. The War Office have, however, stated that either of these alternative methods would be agreeable to them; it is a point that easily lends itself to adjustment between now and the date when the asylums are handed over.

The board agree that it would be right that expenditure in respect of harmless lunatic patients retained at the hospital should be charged in the War Office account and that credit should be taken therein of all sums received from guardians in respect of their maintenance. The effect of this arrangement will be that no charge will fall on the War Office.

Under No. 6, on page 2, the board understand that the War Office are prepared to grant military rank to certain members of the medical staff, and that the omission of the words "The War Office . . . Medical Staff" in the first lines was not intended to affect the decision.

With regard to the second paragraph on page 2 commencing "In cases in which the weekly cost is less . . . " the board, as some of their members have explained when this question has come up at conferences, are of the opinion that the Lunacy Act appears to require that not more than the actual cost of maintenance be claimed from the guardians, and if this principle is adhered to the question of an abatement to the War Office—as referred to in this paragraph—will not arise.

The board have given careful consideration to all the points set out in the War Office statement. They are of the opinion that none of them conflicts with any of those in the board's scheme. The latter was based on the conditions upon which the various asylum authorities so willingly promised their assistance, and the board have confidence that they will agree that the interests of the ratepayers and the position of the visiting committees have been amply and properly safeguarded.

In gladly accepting the offer of the nine asylums to be vacated, the War Office have stated how much they appreciate, not only the willingness of the authorities and staff of those institutions to place them at their disposal, but also the hearty co-operation of the authorities and staff of all the receiving asylums, without which they realize that the scheme would not have been practicable.

I am,
Sir,
Your obedient Servant,
(Signed) O. E. Dickinson,
Secretary."

The first employment of this plan made about 12,000 beds available. Since then additional institutions under the Board of Control, and under the boards exercising similar functions in Scotland and Ireland, have been taken over for military purposes. On July 1, 1917, twenty-one such institutions with a total capacity for military patients of 27,158, had been made available for the use of the War Office. A list of these institutions showing their capacity as civil institutions and as military hospitals and indicating those which have been used for mental and nervous cases is given on the following page.

In all cases, even where the military hospital was to be used for insane soldiers, the name was changed "to escape the asylum tradition." This is a pathetic reminder of the stigma which still clings to mental diseases and institutions for their care in England. The old names of these institutions with their "asylum traditions" are still good enough for the wives, mothers and daughters of soldiers. It is earnestly hoped by the men in England who are striving to change this popular attitude toward mental illness that, when the war is over, the new names will be retained and the word "asylum" will be permanently replaced by the word "hospital."

The transfer of upwards of 15,000 insane patients was successfully and safely made, although not without distressing incidents. Col. Thomson said that in his institution he was surprised to see the attachment which old patients felt for the place which had been their home for so many years—in some cases from childhood. The other institutions were able to absorb these great additions to their population but only with considerable inconvenience and some hardships. Not a few patients were taken home by their friends. Partly as a result of the inability of the overcrowded institutions to take new cases except in emergencies and partly as a result of the reluctance of relatives to send patients to distant institutions, the admission rate from the civil population of

County and Borough Asylums which have been Vacated of their Patients and Converted into Military Hospitals, July 1, 1917

Former name (as a civil institution)	Present name (as a military hospital)	Capacity		
		Former	Present	
England:				
Newcastle-on-Tyne City Asylum, Gosforth, Newcastle-on-Tyne.	The Northumberland War Hospital.	884	1,179	
West Riding of Yorks Asylum, Wadsley, Near Sheffield.	The Wharncliffe War Hospital.	1,699	2,265	
Lancashire County Asylum, Winwick, Warrington.	*The Lord Derby War Hospital.	2,248	2,997	(1)
Birmingham City Asylum, Rubery Hill, Birmingham.	The 1st Birmingham War Hospital.	1,397	2,363	
Birmingham City Asylum, Hollymoor, Birmingham.	The 2d Birmingham War Hospital.			
Norfolk County Asylum, Thorpe, Norwich.	The Norfolk War Hospital.	1,045	1,393	
West Sussex Asylum, Chichester.	The Graylingwell War Hospital.	729	972	
Bristol County and City Asylum, Fishponds, Bristol.	The Beaufort War Hospital.	937	1,249	
London County Asylum, Horton, Epsom.	The Horton (County of London) War Hospital.	2,174	2,899	
Middlesex County Asylum, Napsbury, St. Albans.	†The County of Middlesex War Hospital.	1,800	1,520	(2)
Middlesex County Asylum, near Tooting, London, S. W. (block for defective children).	*The Springfield War Hospital.	250	278	
Northampton County Asylum, Berrywood, Northampton.	Northamptonshire War Hospital	997	1,329	
The Maudsley Hospital, Denmark Hill, London, S. E.	‡Part of the 4th London General Military Hospital.	(3)	200	
Lancashire County Asylum, Whalley.	Queen Mary Military Hospital.	(4)	3,000	
Hampshire County Asylum, Park Prewett.	Park Prewett War Hospital.	(4)	1,000	
Moss Side State Institution, Maghull (near Liverpool).	*Moss Side Red Cross Military Hospital.	(5)	345	
London (Manor) County Asylum, Epsom.	Manor (County of London) War Hospital.	1,085	1,447	
Wales:				
Cardiff City Asylum, Whitchurch, Cardiff.	The Welsh Metropolitan War Hospital.	729	972	
Scotland:				
Renfrew District Asylum, Paisley.	†The Dykebar War Hospital.		850	
Perth District Asylum.	†The Murthley War Hospital.	(?)	400	
Ireland:				
The Belfast District Asylum, Belfast.	†The Belfast War Hospital.	(?)	500	

* For nervous cases. † For mental cases. ‡ For mental and nervous cases.

(1) 1,000 beds for mental cases. (2) 350 beds for mental cases. (3) New psychopathic hospital; never occupied. (4) New institution for the insane; never occupied. (5) New institution for mentally defective delinquents; never occupied.

England, Scotland and Ireland has shown a considerable reduction. In the United States we have ample evidence of the effect upon the admission rate of the standard of care provided by public institutions and have seen how easy it is, in states which shirkt heir responsibilities in this matter, to force the insane back upon their homes. In many of the hospitals from twenty to eighty of the quiet male patients able to work remained—usually in detached villas. Such patients are happy and carry on the work with which they are familiar in the novel surroundings of a military hospital.

The total cost of turning over these institutions was not ascertained. In the case of the Norfolk Asylum it was $90,000.00.

The capacity of the institutions was almost invariably increased, the average ratio being 4:3. This is due to the fact that most of the day rooms could be used as wards and dormitories, so large a proportion of medical and surgical patients being bed patients.

A revolution came into the lives of the personnel of these institutions. The medical superintendents, with one exception, were left in charge of their institutions, receiving commissions as lieutenant colonel or major (temporary) in the Royal Army Medical Corps. Most of the junior physicians were also commissioned in the Army and retained at their hospitals. The male attendants were enlisted in the Royal Army Medical Corps under a special arrangement. For them a safe and easy way of "doing their bit" in the war was provided at the cost of a slight decrease in pay. This solved for the superintendents the perplexing problem of keeping their employees. Responsible employees became non-commissioned officers, and some helpers, ineligible for military service, were retained as civilian employees. The female attendants became probationers in the nursing corps. In most cases the change was satisfactory. Many of the younger women have been attracted by the work of general nursing and will probably complete their training after the war. All will be better attendants for the training they have received. In the case of a few older female attendants who had not had the advantage of a regular nurses' training but had filled places of responsibility, some friction developed. The general spirit, however, has been that of hearty good-will in the new work. This has been due in large measure to the great part which the war has come to play in the lives of Englishmen and Englishwomen and the deep feeling of obligation to serve their country which inspires people in all stations of life. It is very doubtful if such an enormous and difficult task as the conversion of these institutions to another purpose could have been successfully accomplished without patriotic submergence of self-interest by officers and employees.

In the institutions which are used as military hospitals for mental cases (see list, p. 360) the changes made were less radical. The male attendants received 6d. a day more than their regular pay as enlisted men in the Royal Army Medical Corps on account of caring for mental cases. The female attendants presented a difficult problem in these hospitals, as female attendants are not yet employed in male wards in English hospitals for mental diseases. In one hospital (Dykebar) it was found possible to staff several wards with female nurses although a male orderly is on duty in each. Bed cases are cared for in this hospital by female nurses. A detached villa for convalescent patients is entirely in charge of female nurses. Another villa in this hospital was entirely staffed with female nurses but the type of patients was not just suitable and further complications arose from the fact that the charge nurse married a patient upon his discharge and this interfered with conditions apparently necessary for good discipline. Other wards in the hospital have female nurses and they are assigned to the distribution of food. At night the whole institution is under an assistant matron who has three female assistants, a sergeant and ten male orderlies. One outcome of the conversion of the institutions seems likely to be the employment of female nurses in men's wards in civil institutions in England. No one who has seen the success with which this is done in the United States and its rapid extension as a result of its efficiency and the increasing difficulty of securing good male attendants will regret it.

The impression one gets in visiting the military hospitals which have been created out of civil institutions for the insane is that an enormously difficult task has been accomplished in a wonderfully efficient way. Great credit for this is due to the Board of Control for the thoughtful planning of the transfer in advance, but its success is due also to the remarkable unanimity with which visiting committees, medical superintendents and employees co-operated in removing obstacles and subordinating all other considerations to the successful solution of the entirely unprecedented problem before them. Most of the institutions are of the cottage type with many small detached buildings. They have proved exceedingly desirable general hospitals and it is doubtful whether any other institutions in England would have provided such excellent facilities for ill and wounded soldiers. Nevertheless one's thoughts turn to the helpless insane, never too well provided for, who were turned out of their hospitals and whose comfort as well as chances for recovery must have been seriously impaired by the change. The necessity was so great that these considerations could not be taken into account. If similar pressure comes to the United States and the interests of the insane or any other helpless group must be subordinated to the great object of winning the war, we shall have no choice, but we cannot help feeling that the task of vacating half the beds in the state hospitals of a state like New York would be undertaken with a heavy heart by those who know the needs of the insane, and who realize how little they share, even in time of peace, in the provisions which mitigate the sufferings of other ill persons.

THE BROADER PSYCHIATRY AND THE WAR*

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AT the entrance of the United States into the war it has become apparent that the ordinary haphazard methods of times of peace must be discarded. The President has urged upon the country serious consideration of the fact that for a successful prosecution of this war the entire resources of this country, both human and material, must be made effective. The various pursuits of business are being weighed with the view of discarding everything that is not essential to the waging of war.

It may be well, therefore, to examine for the moment the place of psychiatry in the general scheme of organization for war. According to the general conception, psychiatry deals individually with the problems of insanity, feeblemindedness, and related psychopathic states. That war carried on under the terrific modern conditions has largely increased the problem of mental diseases is apparent from a study of the reports from the European belligerents during the first two years of this war. The United States is profiting by the lessons learned abroad and is adopting the plan of the National Committee for Mental Hygiene to incorporate in the medical service of the Army and Navy special units which deal with mental diseases. The psychiatrist who wishes to serve with the colors will find an opportunity here for applying his knowledge in connection with the military and naval operations.

There is, however, a large field of activity in which the psychiatrist and psychologist must take a leading part which has been much neglected in times of peace and which, under conditions of war, is in great danger of being entirely pushed into the background. It is of the utmost importance in the interest of national organization that such oversight should be prevented.

This wider field of activity for the greater psychiatry includes not only the recognized problems of insanity, feeblemindedness and psychiatric states in general but a large group of phenomena, mostly social in their bearings, such as delinquency, inebriety, prostitution, and various phases of delinquency and social failure.

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* This communication embodies remarks made by the author at the annual meeting of the Chicago Neurological Society, May 18, 1917.

While these problems are now dealt with largely from the legal or social point of view, there is great need for the application of a more medical point of view. With changing conditions brought about as a result of the increased concentration of population in urban communities the general problem of human personality has come to be one of the important issues of social organization. Individual variations of character and the accidents of life, which occur where there is little elbow room for personal peculiarities, have forced society to call with increasing frequency upon specialists in mental abnormalities to help elucidate widely diversifying social problems. The agencies of the law and the forces of industrial organization have dealt with these problems for some time on the basis of the greatest good for the greatest number. This has resulted in general policies which while sound in the main are not always applicable in the individual case. The medical point of view which concerns itself chiefly with the individual problems rather than with general policies is essential. Since by far the majority of the population may be considered healthy, the problem presented by the minority of socially inadequate individuals does not appeal to the public as one of pressing importance. The enormous resources of the community are such that in times of peace they readily compensate for the lack of adjustment in this regard.

Under the conditions of a war of the magnitude of that into which the United States has just entered it must be clear to any thinking individual that this margin of safety will be largely wiped out. We can no longer neglect the serious problem of the delinquent and the dependent because of a misplaced confidence in the reserve strength of the country. The experience of the nations of Europe during the first two years of the war is sufficient evidence that the solution of these problems cannot be left to chance but that a definite and purposeful plan must be devised to enable us to deal properly with the various phases of the greater psychiatry. The first duty in preparing a plan of this sort will be to change the prevailing opinion in regard to the nature and object of psychiatric service in general. At present the public has the conviction that the problem is largely one of segregation. The function of the psychiatrist becomes almost entirely that of passing opinion on the committability of the patient suffering with symptoms of mental disease. At a time when it is important to maintain every individual as a safe free member of the community the exactly opposite point of view is the one which should prevail. The result of the present method is that huge sums of money are annually expended upon the maintenance of institutions for the segregation of the insane and feebleminded while there is very little provision for assistance to psychopathic individuals during the early or milder stages of mental abnormality. A patient must exhibit marked signs of disease before he can be committed and receive intensive care. But since these advanced cases do not offer a good field for constructive therapy, the result is that the work at the institutions is largely that of custodial care. If the emphasis is to be placed upon maintaining the psychopathic individual in the community as a self supporting and inoffensive citizen, it will be necessary to provide for proper classification at an earlier stage of all cases requiring psychiatric help so that intensive treatment will be concentrated upon the hopeful cases. The method of segregation should, therefore, be supplemented amply with provisions for dealing with early cases and for treatment to be offered in special institutions or in homes without raising the question of permanent commitment. The cornerstone of such an organization must be a center of authoritative information properly equipped to receive patients for a short period of observation, examination and treatment. Such institutions must above all be easily accessible to the general public. The psychopathic hospital, as it has been recently developed, is the proper nucleus around which the various activities of the courts and relief organizations can be grouped. The organization of the army medical service may be used as a standard in devising this psychopathic service. This organization calls for provisions for first aid immediately behind the firing line. From these units the patients are passed on to the field hospitals where the preliminary classification and most urgent treatment is applied. From the field hospital and distributing hospitals patients are either returned to the firing line or passed on to the base hospitals. The object of the service is to keep the men as long as possible on the firing line or to return them in the shortest possible time for active duty.

Applying this idea to the psychopathic service, the psychopathic hospital may be regarded as the field hospital or distributing hospital. The outpost duty, the first aid service, must be rendered as near to the actual fighting as possible—that is, in this case, in the courts, the out-patient departments, the dispensaries and wards of the general hospitals, and in connection with the police and boards of health.

In the community work there is an additional problem which does not ordinarily occupy a prominent place in army medical service, viz., that of the juvenile cases. It has been the experience abroad that the effects of the industrial speeding up caused by the war, the employment of child labor in munition factories and other industries, and the relaxation of vigilance both in regard to schools and the home, has resulted in an enormous increase in delinquency. Aside from the social, industrial and legal aspects of this problem, there are other psychopathic considerations involved. This makes it imperative that any scheme for psychopathic organization should include ample provision for rendering psychiatric aid to the schools, the juvenile courts and the private relief organizations dealing primarily with children. In the larger cities it is perhaps wiser to deal with these problems under separate organizations—a juvenile psychopathic institute which should be parallel in its main characteristics of arrangement with the psychopathic hospital for adults. The officers who are rendering psychopathic first aid to the community in connection with the courts, police systems and schools, should be attached to the psychopathic hospital staff. With the psychopathic hospital as a receiving station or clearing house, it will be possible for these officers to reduce their examinations to a standardized minimum which will allow them to pass on practically all the cases presented in the particular court or school to which they are attached. This standard of minimum examination will disclose the cases requiring further study. These can then be referred to the psychopathic hospital for more thorough study or for more satisfactory classification and intensive treatment. From the psychopathic hospital the individuals suffering from the most severe forms of disease can thus be passed on to the custodial institutions while the milder cases may be returned to the community, either as recovered cases or under supervision. In order to make this work effective it will be necessary for the psychopathic hospital to maintain a dispensary or out-patient service to which anyone may come without the fear of being incarcerated. When the public realizes that the underlying idea of this service is not to seize and segregate as many cases as possible but to assist the individual to maintain his place in the community, there will be an opportunity for applying treatment in numerous cases which under the present system would never appeal for aid. It has been one of the astonishing facts of the out-patient service in connection with insane hospitals that the numbers of voluntary applicants far exceeded all expectations.

Before such work can be effective the confidence of the public must be obtained. It is obvious that this cannot be done unless the patient and his relatives and friends have the assurance that the mere existence of psychopathic authorities will not make anyone liable to involuntary commitment. A very important point in this connection is the great need of sources of authoritative information. Unless this work is properly organized the public is in much the same position in regard to psychiatric work as it is in ordinary times in regard to general health problems. Public health service has accustomed the community to call in the services of experts guaranteed by the municipality, the state or the federal authorities in certain contagions. The boards of health are regarded as authorities on the subject of *diagnosis* of diphtheria, and exanthematous diseases. In the matter of *treatment* we are still very backward. It is interesting to note that in the field of mental diseases the public health officer is looked to more often for treatment than for diagnosis.

The psychopathic organization here outlined would serve to render both sorts of service to the community, viz., both diagnosis and treatment. The functions of the psychopathic service are (1) preliminary examination and first care and treatment for all cases; (2) intensive examination, care and treatment in special cases; (3) preliminary disposition in all cases: that is (a) return to the community with or without continued supervision; (b) transfer to custodial institutions, and (c) prolonged care at the psychopathic hospital; (4) investigation into the natural causes, treatment and prevention of mental abnormality and maintenance of mental health; (5) instruction of workers in this field and the dissemination of authoritative information for the benefit of the public.

The staff of this organization should include as heads of the various departments full time workers of high grade. The work may be divided into (1) clinical, viz., psychiatric and routine medical work with suitable laboratory service and provisions for medical and psychiatric treatment; (2) psycho-pathological, concerned with psychiatric investigation and mental testing; (3) nursing; (4) social service, which should include social investigation, follow-up and after-care work, education, occupation and various forms of personal service; (5) suitable administrative department to manage the routine business, and executive officers.

In considering the organization of such a service the question arises as to the authority under which it should operate. Since the care of the insane and feebleminded has become largely the function of the state rather than of the local community, it is not always clear where the line of division of labor between state and municipality lies. This is specially marked in those cases in which the mental abnormality is not sufficiently clear to cause the question of committability to be raised. The local communities, municipal and county, are still responsible for certain grades of delinquents and dependents. The result is that unless the question of feeblemindedness or insanity can be raised, these individuals can be dealt with without any consideration of the psychiatric needs. It may not be possible at the present time to organize a single institution of sufficient size, both in regard to the number of beds and the number of officers, to properly deal with the psychopathic needs of a large community. It will be necessary, therefore, for co-operation of effort on the part of state, county and city, so that the psychiatric service may be made available to the general public and to the courts, police, jails, schools, and relief organizations, both public and private. In times of peace this might be a difficult problem. When the country is at war, it should be easier.

A large psychopathic hospital under state authority can serve as a nucleus around which are grouped all the activities of the community regarding psychiatric service. The workers in the courts and schools may be co-ordinated with the psychopathic hospital staff regardless of the source whence they draw their salary.

The unattached psychiatrist who wishes to render a public service to the country in time of war will find an opportunity for sharing in the work of such an institution either in the dispensary attached to the psychopathic hospital, or the dispensaries or wards of the general hospitals, or in connection with the police, the jails and the courts.

In the work of prevention and in the treatment of the early cases, one of the most important instruments available is social service in its various specialties. With the increasing dependency and delinquency which is the inevitable result of war, the provisions that the state can make or those of the private philanthropies, will unquestionably be entirely inadequate. It is here above all that the unattached psychiatrist can be of the greatest service. The efficient application of such funds as are available depends upon a careful classification of the individual case. The social worker requires professional guidance in mental cases in order to achieve satisfactory results. Individual effort while valuable will not suffice in this respect. The benefits of group activity are here most obvious. It will be necessary to work out standards and policies such as no individual has time or opportunity to do.

In the application of these policies and standards, furthermore, it is necessary that there be an element of elasticity which will enable the effort to be concentrated at various points and shifted from time to time as the occasion demands. By integrating all the activities under one single organization it will be possible to work out such standards and above all to increase the efficiency of the worker by the possibility of shifting him from one place to another as emergencies arise.

THE RELATION OF PSYCHOLOGY TO MILITARY ACTIVITIES

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WAR is a product of the human mind: its pursuit involves every form of human behavior. The fighting machine includes organic, living elements, as well as the non-living or purely mechanical. Modern warfare is frequently described in terms of the non-human mechanism of destruction as though the consciously guided individuals who plan, construct, and operate these mechanisms were of minor importance. Obviously this is a mistake. Indeed, just because conscious behavior creates war, psychological problems inevitably confront the military expert at every turn. Germany has at least, and at last, convinced the world that scientific knowledge and conduct based thereon must be taken seriously. There is every reason to suppose that she has applied to her great task of world conquest, expert knowledge of human nature—mental constitution, behavior, vocational possibilities, human efficiency—much as she has utilized the facts of the physical sciences.

Happily the federal administration and the military authorities of our country are scarcely less alive than are men of science themselves, to the necessity for establishing at once effective working relations between the constructive scientific expert and the military departments.

Months ago the National Research Council was organized, at the request of President Wilson, to co-ordinate and mobilize the scientific resources and forces of the country in the interest alike of national defense and national welfare. This Council, under the able chairmanship of Dr. George E. Hale, has worked in intimate relations with governmental, administrative and military authorities. Recently, at the request of the Council of National Defense, it has agreed to serve during the war as a department of that body.

The Research Council, often at the suggestion of military officers, is referring to competent experts for immediate attention and solution problems of urgent importance to the Army and Navy. Thus chemists, physicists, geologists, botanists, physiologists, and psychologists are being called upon to render national service. This is one of the significant developments of our times; and although at present we are but traveling in the pathway which Germany has followed, it is almost certain that American inventiveness, resourcefulness, energy, efficiency, and our vast mechanical resources will shortly open new approaches to military superiority and will supplement, in a manner which she did not anticipate, Germany's demonstration that scientific knowledge begets "power."

The layman, when told that geologists, botanists, or psychologists, in their professional capacity, can render significant service to the military organization, finds it difficult to imagine how. He need only read Dr. Penrose's little volume "What a Geologist can do in War."* to be convinced that the facts and generalizations which concern geology may be extremely important to military officers and may at any moment predicate success or failure in a charge or in a campaign. Similarly, the botanist's knowledge of plant resources and properties may have much to do with the economy and efficiency of construction, organization, equipment, and maintenance of military mechanisms and forces. Finally, the psychologist comes to the front with the suggestion of varied lines of service. It is the purpose of this article to describe very briefly a few of the many things which he is eager to do and feels prepared to do for national defense.

Since the psychologist deals especially with the conscious activity of men, he should be a master in the description and valuation of human nature and an expert in the measurement of significant aspects of human response. In this capacity, recruiting offers him an important special task; that, namely, of classifying men according to their mental characteristics and of indicating their degree of adequacy for military training or special tasks in the military organization. By means of especially developed and adapted methods of psychological examining, it should be possible to gain information concerning each individual upon which may be based important recommendations to medical or to line officers.

It is commonly supposed that psychologists are eager to select and eliminate the feebleminded from the service, but those professional experts who are thoroughly conversant with the military situation and with the possibilities of their methods of examining, are far more interested in properly classifying men in the military service than in excluding the mentally defective. The fact is that in military, as in industrial organizations, reasonably suitable places can be found for those of little intellectual capacity, quite as readily as for those of great ability.

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* J. B. Lippincott Company, Philadelphia, 1917.

It is also fully realized by the psychologists who are preparing themselves for national service, that current methods of mental examining are unsuited to military demands and that consequently new and especially adapted methods must be prepared if the results are to be trustworthy and practically serviceable.

In connection with the preliminary handling of recruits, it is the prospective function of the examining psychologist first, to aid in the elimination of those who cannot safely render service worth their hire; second, to indicate various degrees and kinds of special ability and to relate them to the tasks of Army or Navy, so that each individual shall be placed in a position of maximum usefulness; and third, to detect those who by reason of mental instability or psychopathic condition demand the attention of the medical expert. Such individuals should be referred to the staff of the Neuro-psychiatric Hospital unit for special study.

Undoubtedly, the greatest opportunities for psychological service are the classification of men with respect to the relations of reactive capacity to military activities, and the elimination from Army and Navy of men who are either useless or dangerous because of extreme defectiveness or mental instability. Psychologists strongly prefer to emphasize the positive rather than the negative aspect of their work. Elimination seems to them far less important than the constructive service of increasing the recruit's value by finding just the right place for him.

It is said that the French have roughly classified their recruits, according to physical and mental characteristics, in four groups—the gastro-intestinal, the muscular, the nervous, and the respiratory—and that they have further assigned the men to military duty on the basis of this classification, placing in positions of special hardship and prolonged physical strain, the gastro-intestinal type; using for hard, continuous labor the muscular type; assigning to work which may at any moment make extraordinary demands for reserve energy and quick response the nervous type; and using for aviational service the best of the men of the respiratory type.

How much there is in this classification or in its suggested vocational significance, the writer is not prepared to say; nor has he definite knowledge of the precise manner, or the extent, of its application.

Aside from the examining of recruits for such purposes as have been suggested above, many interesting military applications of psychological measurements have been suggested by those especially competent to deal with the matter. Two or three of them will now be presented as examples of possible lines of psychological usefulness.

The first is the study of gunnery. It is highly probable that appropriate measurements of the responses of men to demands made on the naval gunner will shortly furnish data which are valuable, first, for the selection of those who are especially well adapted to this kind of service and, second, for the discovery of individuals who improve most satisfactorily under training. Psychological measurements, properly made, and specially chosen, might be of great value to the officer in charge of the training of gunners, just as educational measurements, which are now made in many school systems by or on the advice of psychologists, serve to guide the teacher in his educational treatment of pupils.

Already an experimental psychological study of naval gunnery is in progress.* The hope and expectation of those who are concerned with this task is that the method of measurement which is being used may yield results whose value as a basis for the selection of men and for the guidance of officers in the training of those who are selected may fully justify the National Research Council in recommending that competent scientific experts be commissioned to apply the method systematically in the naval service.

This task naturally involves the simultaneous or successive measurement of several important aspects or phases of the man's reaction. Thus quickness, accuracy, steadiness, endurance are important, and whether a man is well or ill fitted for naval gunnery depends in considerable measure upon these characteristics of his behavior.

Needless to say, the psychologists who are responsible for the organization and furtherance of the contributions of their profession to defense will not urge or even recommend the use of any psychological method by the government until trustworthy results have wholly convinced them of its practicability and importance. For they fully realize the seriousness of the nation's need and the folly of burdening over-taxed Washington officials with ill-considered, visionary, or inadequately developed plans.

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* Under the direction of Dr. Raymond Dodge.

Oftener than any other psychological military task, we hear mentioned today the examination of aviation recruits. It is true that this is an important opportunity for the psychologist and one which he has been eager to improve in Europe as well as in America. Psychological measurements are now being made* with the authorization of the proper military authorities on classes of aviation recruits who are being trained preparatory to their first lessons in the flying schools. These measurements, it is hoped, may lead to the development of a method for the wise selection of men for this peculiarly difficult and dangerous type of service. Presumably, few individuals are preëminently well fitted for it. The question which our psychological experts are asking is, "How may we most certainly and conveniently select the men who are well adapted for tasks of aviation, while at the same time eliminating all who are relatively ill adapted?"

The present plan of procedure is somewhat as follows: A series of measurements of various forms and aspects of reaction is made on each recruit. Later other measurements are made of his reactions as he is taught to fly. The first series of measurements is then studied in relation to the second; thus the psychologist hopes to discover which of his original measurements indicate the type of man who may be expected to succeed best in the flying schools.

Clearly the first stage of this work, as of all other attempts to make scientific measurement practically serviceable, is that of research. The next will be that of demonstrating the utility of the measurements. And the final stage, assuming the willingness of military authorities to avail themselves of the expert assistance of scientific men, would naturally be that of the selection of experts to examine all aviation recruits, in order that only the highly adequate men shall be selected for training.

In this connection it is worth our while to consider for a moment the possible cost in property and life of a single incompetent aviator. There is first the risk that he may needlessly wreck his machine, cause the loss of other ships, or fail to destroy his enemy's ship. These failures may in turn entail heavy losses to the forces which he is supposed to protect and finally his own life and perhaps that of many of his comrades may be sacrificed to his inadequate skill. Thus it may appear that to the incompetence of a single man, or rather to his lack of special fitness for his task, must be attributed the needless loss of thousands of dollars and of scores of valuable lives. When one views the situation in the light of such possibilities, one cannot for a moment question the desirability of using to the utmost our available scientific resources for the selection and training of the proper type of men in this and other lines of special military service.

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* By a committee of which Dr. H. E. Burtt is chairman.

What has been written of naval gunnery and of aviation is equally applicable to many other kinds of service, for an individual who is invaluable in connection with one task may be of little value for another. If psychologists—experts in the study of behavior that they should be—are not able to render signal service to the nation by discovering and indicating in practical ways the relations of human characteristics to special tasks, they certainly will deserve and receive but little consideration from their fellow-men of science.

THE STATE HOSPITAL AND THE WAR

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AT such a time as this, when all the resources of the nation are being marshalled, with the sole object of bringing the war to a successful issue, it is natural that everyone should ask himself what he can do to help or, if he is in a position of influence, how he can best utilize that influence. To one not familiar with the facts, it might be supposed that the patients in the state hospitals for the insane throughout the country were, by the very circumstance of their being patients in such institutions, incapacitated for taking any part whatever in helping to effect national preparedness or for supplying any energy that would assist the nation in prosecuting the war. Those of us who have lived in these hospitals for many years know that this is not so; that in the very large population of the so-called "insane hospitals" throughout the United States, in spite of the great and irretrievable loss of energy through misdirection, there is a very large amount of energy still available, energy which is still capable of being turned and, in fact, is being turned every day into useful channels of activity. What are some of the practical things that the state hospitals can do with this available energy?

First, and most important, the state hospital should attempt to become more nearly self-supporting; that is, they should try to produce, as far as possible, the various things that they use, so as to diminish the necessity of going into the market for them. This applies of course primarily at the present time to farm products. There is a food shortage that is, practically speaking, world wide, and very great efforts will have to be made in order that there shall be enough food during the coming year not only to supply the needs of our own people and to furnish food to our allies and to those who have been rendered homeless and helpless by the devastations of war, but also to furnish it at such prices as will not make its purchase prohibitive, and thereby indirectly tend to increase suffering. In view of this enormous and widespread demand for food, each state hospital throughout the country should undertake the cultivation of every bit of tillable soil of which it is possessed. I mean this literally. I mean that not only should all the ordinarily available farm land be used but there should be no hesitation in plowing up lawns, no matter how beautiful they may be to look upon, provided their extent and the character of the land is such that a worth while crop may be expected. In addition to the large expanses of lawn which many state hospitals could put under cultivation, smaller and perhaps more numerous patches of ground in connection with the separate buildings, not worth while for the general farm force to attempt to utilize, could be cultivated by patients from the adjacent buildings who have not sufficient physical vigor to work on the larger farm plots but who could take care of these little patches. Such work is especially adaptable for women patients. Patients who otherwise might enjoy cultivating flowers could thus care for a small patch of ground perhaps ten feet square, and if these were multiplied about the place it would not only add to the productiveness of the hospital land as a whole, but it would have the very great additional effect of stimulating the patient population in a way that would be beneficial to themselves, to the hospital, and to the country.

Before proceeding further I may say that this psychological stimulation is very valuable. Throughout the state hospitals there are large numbers of patients who, under ordinary conditions, are prevented by the character of their mental illness from engaging in useful occupations. That indefinable thrill which a state of war sends coursing through every patriotic citizen is a wonderful activator for diverting such energies into useful channels, and I can think of no one thing that can so stimulate the whole patient population as to see the gardening activities going on in the way above described. Such plowing up of lawns and planting of small gardens at once exemplifies the meaning of the whole movement. It indicates the very great necessity with which the nation is confronted when hospitals which have always used large tracts of land simply for their beauty should be forced to destroy all this beauty and, so to speak, to utilize them in the production of food; it also indicates that element of sacrifice which is necessary in order that the nation shall attain its fullest powers. This sort of demonstration of the situation by the hospital authorities will help to start patients in the right direction, and may easily, for many of them at least, be the starting point of activities which will ultimately result in their recovery. This is a golden opportunity not only for bringing great and unexpected help to the country but also for helping the patients to a realization of the great truth that work is not drudgery but opportunity.

There are in the various state hospitals all sorts of industries; in general, brushmaking and broommaking, matmaking and chaircaning, shoemaking, tailoring, cement work, and various kinds of handicraft of the more diversional and artistic kind are the industries that are cultivated. Most of these industries have been kept at a relatively low output because, in general, it has been considered undesirable to introduce factory or machine methods of production, the reason for this being that the thing primarily aimed at in these industries was the useful and congenial occupation of the individual patient. Inasmuch as the products which were turned out by the various shops could be utilized only to a small extent, the hospitals for the most part having no outlet for any excess production, manufacturing efforts have been kept at a primitive handiwork level. I think that it would be distinctly wise in those states where there are several hospitals under a central authority, whether a commission, or a board of control, or whatever it may be termed, to make an effort to increase the output in these several shops, and where there is at present no outlet for over-production then it would be wise to have each hospital specialize in the manufacture of a few articles. One hospital might, for example, put in the necessary machinery and make shoes not only for its own consumption but for all the hospitals, while another hospital might specialize, let us say, in brooms and brushes, another perhaps in furniture, etc. I am satisfied that if this were done we would find that in states where there are several hospitals all of the ordinary manufactured products could be made by the patients, and I also feel satisfied that, in many instances, if the most modern machinery were installed a great amount of material could be manufactured over and above what was needed for home consumption. Now, if in the organization of the industries only those were stressed in which it was desirable and possible to overproduce, industries could be developed which would be available for the fighting forces. I am sure that the making of shoes could be pushed to such an extent that the state hospitals in a particular state could not only make all of the shoes for the insane but could make a considerable over-supply, and I think that it would not, or at least it ought not, be a difficult matter to turn this over-supply into the state for equipping the militia or to the federal government for equipping the federal troops.

I am not sure, of course, that a plan such as I have suggested is the best plan. The important point that I wish to make is that I believe fully that, with modern methods of machine manufacture, there are enough patients in the institutions of the country who could be trained in manufacturing activities so that the product of their work could be made a very material asset. The industries of the hospitals as a whole, so far as I know, have never been adequately organized. The organization usually is confined to the individual institution. I am satisfied that a broader scheme of organization could be made to produce much larger results.

To the suggestions already made, I might add that the women patients especially could do much sewing and knitting for the military forces. There are innumerable things which the soldiers and sailors need in the way of socks and mufflers and, more important than these, surgical dressings and pajamas, for the hospitals. The Red Cross is collecting enormous amounts of these articles and enrolling large numbers of people into the service of making them, but if we ever get into the war as our allies have been in it for nearly three years, we will need this material in ever-increasing quantities, far beyond anything which has at present been collected. State hospitals that are in the neighborhood of Red Cross branches might, therefore, co-operate to advantage with these branches in training some of their patients in doing that particular work which would be most useful. Even if a particular state hospital is not near a Red Cross branch, it may be near another hospital which is being equipped for military purposes, the management of which would probably be more than glad to have such assistance.

In addition to those already suggested, there is another form of activity which is possible in certain localities. In state hospitals having a large population drawn from farming districts where the cultivation of the soil has been brought to a high degree of efficiency, there are not infrequently many farmers in the immediate neighborhood who, because of the present conditions, the shortage of help, and the conscription, will be unable adequately to gather in their crops. If they do not get help, considerable portions of the crops may be damaged or destroyed. I think it ought to be considered perfectly proper for a neighboring state hospital, if it is possible for it to do so, to co-operate with the farmer in getting in his crops. This would mean simply that the state hospital was helping a particular citizen of the state who was rendering a service of national value, and I think it would be an eminently proper activity.

Finally, the National Committee for Mental Hygiene is undertaking to equip and to provide the personnel of psychiatric units to be attached to the base hospitals of the Army and the Navy so as to insure the proper and humane care of those members of the fighting forces who become mentally ill. In this work the National Committee must necessarily look to the physicians and the nurses of the state hospitals to volunteer for service in these units, because what is needed is the experience which such physicians and nurses have in caring for the mentally ill; other physicians and other nurses do not have this experience and, therefore, are not sufficiently well equipped to deal with the special problems involved. The state hospitals can contribute doctors and nurses to this particularly valuable work. Naturally it will be only the younger men and the younger women, with perhaps some of the younger supervisors, who will volunteer for such service. It is equally important that a sufficient number of physicians and nurses should remain behind, not only to care for the sick but to help to train additional physicians and nurses for this particular duty, so that there may be a constant supply if the demand should increase.

In all probability, with an army of from five hundred thousand to two million men, the number of mentally ill will be too great to be accommodated in the psychiatric units and in the Government Hospital for the Insane at Washington, and therefore presumably an arrangement will have to be made whereby those soldiers and sailors who are affected in such a way as to require hospital care for a considerable time will be sent to a state hospital of the state of which they are resident. The state hospitals will therefore become indirectly a part of the general machinery of caring for the cases of mental illness which arise in the fighting forces. The federal government will undoubtedly undertake to reimburse the hospitals at the per capita cost of maintenance and the hospitals can do their share by so re-arranging their facilities as to accommodate as many as possible of these cases.*

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*It is suggested that hospitals desiring to increase rapidly their capacity might erect units such as are used by the army in constructing its hospitals. These are the units which are described in another article in this number, and the standard size accommodates about thirty beds. They are all-wood construction, and could be erected quite rapidly at a cost of $5,000 per unit at the present price of materials and labor in Washington, D. C. With an additional cost of $1,000 per unit for equipment, the total cost would be $200 per bed. Detailed plans and specifications can be obtained from the National Committee for Mental Hygiene.

This, in brief outline, gives some idea of what part the state hospitals may play in the present world conflict. Of course the problems are different in each state and in each institution. Perhaps, for example, some of the hospitals in the Middle West would find it of great advantage to engage in canning industries, preserving the delicious fruits that grow in that territory. In states where there is only one hospital the production might perhaps be greater than the hospital could use, and the question might then arise whether an interchange of produce between states could not be arranged. Many such problems and opportunities will naturally suggest themselves in a little different form to every superintendent, but it seems clear that each hospital can do its bit, and with the spirit which is now animating all of our citizens it is probable that in many instances this bit will turn out to be much.

SOME OF THE NERVOUS AND MENTAL CONDITIONS ARISING IN THE PRESENT WAR

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THROUGH the efforts of the leaders in the study of the human mind, we are coming to realize that the individual reacts no more logically to his environment than his mentality, previous education, and surroundings would warrant. The results of such realization are seen in the modern attitude of society toward the criminal and the mentally incapacitated. In the great European warfare it may be seen behind the battle line in the presence of men versed in neurology and psychiatry, in the provision made in the hospitals for nervous and mental cases, and in the medical boards appointed for the consideration of such individuals as may have failed in their duty through some abnormal mental manifestation.

Malingering or simulation is occasionally seen, but observation soon exposes the individual irritating his nose to produce nosebleed, inducing abscesses, suffering from "fainting fits," "sciatica," "backache," taking picric acid to produce a jaundice or, going even a step further, shooting off the trigger finger or a thumb, or even contracting venereal disease, with the hope of being sent back from the front.

The large number of cases of mental disorders, functional and organic, makes necessary the presence of a physician trained to make thorough studies of and successfully treat mental cases. This requires a patience and skill obtained only through a thorough understanding of the conditions resulting from fatigue, worry, fright, shock, etc. In the organic cases, where foreign bodies, such as shrapnel, have penetrated the nervous tissue, the X-ray has proven an invaluable asset in localization, for not infrequently, due to more extensive involvement resultant from hemorrhage and destruction, the neurologic symptoms do not correspond exactly with the site of the foreign body.

For the more careful consideration of mental cases in the Base Hospitals, huts should be assigned to a Neuro-psychiatric Service, where the functional nervous and mental conditions can receive proper treatment in the way of complete rest, isolation, dietary measures, and such other treatment as may be required. The cases of organic injury to the nervous system should also be received in a special hut in the surgical division, where the surgeon and the neurologist can more competently care for the wounded and make a more thorough study of the findings.

Coming from his indoor work, the average trooper, physically and morally improved through the out-of-door life and the activity and routine of the camp, undergoes a metamorphosis on the firing line. The fatigue of long marches, exposure, worry over conditions at home, the monotony of trench life, the fear of failing in his duty in a crisis, the morbid anticipation of a charge, of the ground opening beneath him to engulf him, the fear of the "whiz-bang," "torpilles" or aluminum shells that approach noiselessly while the shock of their explosion can be felt through a radius of about fifty yards, the sights of destruction and loss about them, all of these tend to fan any neuropathic predisposition into a flame.

Careful inquiry into the early history of the cases studied met almost invariably with the discovery of earlier neurotic manifestations: impulsiveness, inclination for solitude, avoidance of strange company, reticence, sense of being observed on the street —as one Tommy aptly put it, "the new suit feeling"—fear and timidity in conversation, easy excitability, inclination to jump when on a height, a tendency to blush easily and a feeling of discomfort in feminine company, abnormal sensations over the body, a fear of corners and entries, an uneasiness on crossing a bridge, self-consciousness, St. Vitus' dance, a feeling of hypnotic influence exerted which could not be resisted, fear of being crushed in a crowd, fear in the dark and frequently a sense of being followed at night, in response to which the individual would either hasten his pace or even break into a run, a sense of falling when going to sleep, talking in sleep, nightmares, somnambulism, erotic dreams, nightly emissions, nocturnal enuresis, psychical stricture on passing urine in the presence of others, palpitation of the heart, heart sounds thumping in the ears preventing the individual from going to sleep, and a feeling of incapacity. Physically these individuals were, on the whole, of average masculine type, not infrequently presenting the usual stigmata of degeneration, such as low brow, facial asymmetry, adherent lobules, deviated septum, high palate and the like.

The matter of "the individual equation" in reaction and resistance to outside influences is indeed of interest, inasmuch as many of the cases suffer a common trauma, for example a mine explosion, whereas the results of this common trauma are varied in type and severity.

As in civil life, with the release of mental control, thoughts, fears, desires, repressed to the subconscious, are voiced and the mental condition is often colored by the previous or immediate environment. In one case of acute maniacal excitement the individual frequently mentioned the Iron Cross, Red Cross division, and issued commands. In another mental condition precipitated by the war, the individual at the time I saw him was on his way "to set Lord Kitchener right about the war," traced his heredity from Caesar down through Napoleon, which, together with his being "in rhythmical vibration with the ethereal waves," warranted his assuming a higher military status. Following "burial by mine explosion," or the bursting of a shell in close proximity, many cases are brought in in a stupor with no apparent physical injury or severe psychical trauma, as in the case of a boy of nineteen years, for three days under a heavy fire, who, being threatened by his sergeant with court-martial for sleeping on sentry, was for ten days in a stuporous condition, as was similarly another who had witnessed his chum blown to pieces.

Not infrequently in these cases episodes occurred, when the terrified expression, crouching, starting and staring wildly when spoken to, could not but impress one that the individual was again living through a terrifying experience. One man with profound stupor arose in his bed during the night, recited in a one-sided conversation his entire experience in a charge and burial, and then relapsed into a stuporous state. Tremor and shaking were commonly seen, as in the case of a patient who was buried in a mine explosion on July 19, at Hooge, and again on August 19, at Hill 60. At neither time was he rendered unconscious, but he was badly frightened and his arms and legs shook. On August 19 a mine blew up the trench in which he was stationed and he was partially buried and feared himself killed, but he struggled out of the débris and dashed on into the taken trenches, which were under heavy bombardment for eight hours. In the counter-attack he was badly frightened, his eyes closed, his head and limbs shook and he suffered severe headache.

Disturbances of memory and lapses of consciousness were not uncommon following exhaustion and fright. One soldier, who at the beginning of a bombardment "lost himself," ran from his machine gun up and down the trench until a sharp order from his officer brought him to himself; another stated that at Loos he was carried along in a charge but knew nothing of it; another, at the beginning of a bombardment, dashed from his trench over six traverses and was brought to himself by falling and bumping his head; and lastly, one soldier on regaining consciousness after a shell explosion, found himself walking along a lane. A man, operated on for removal of shrapnel from the knee, on recovering from the anæsthetic, thought himself back in the trenches, talked excitedly of the Germans and guns, moved his cupboard about, thinking it a machine gun, and pointed it at his imaginary enemies. This state lasted three days, when, after a sleep of twelve hours induced by hypnotics, he awakened rational. Another individual, suffering from extreme nervousness following a scalp wound, was lying out-of-doors at the Base Hospital when a storm came up; at the first peal of thunder he dashed to the nearest tree, where he crouched trembling. Shortly afterward he regained himself and returned to the ward.

In the train of the neurotic manifestations, one difficult to combat was insomnia. Many were annoyed by the pounding of the heart sounds in their ears, but the majority simply "could not get to sleep." However, as most of the subjects were young, the insomnia was overshadowed by the occurrence of the horrible trench dreams, night frights, and somnambulistic periods suffered by many of these chaps. One became quite accustomed to seeing patients duck beneath their pillows, rise from their beds weeping and trembling, or shouting loudly, and at times, as in the case mentioned, recounting some horrible experience. The night starts were particularly annoying, as many would awaken with terror, bathed in perspiration but recalling no dreams. Others dreamed of being pursued by Germans with fixed bayonets, of being called to attention or into action and unable to find their clothing or their weapons, of a suffocating feeling across the chest, of losing the trench in the fog and of being unable to get back.

The element of fear or anxiety was relatively uncommon, considering the wealth of fear-producing stimuli, but in the markedly neuropathic individuals one encountered a feeling of incompetence, a fear of doing something wrong and consequently being shot, a premonition of some impending danger, a fear that something might arise in which he would fail or of going to sleep lest he should not awaken. Again, after a mine explosion or a heavy bombardment, the dread of returning to the trenches and fear of being hit was overweighted and conquered by the fear of loss of confidence or ridicule of their comrades; but nevertheless at the sound of the first shell they would frequently lose control of themselves and, seized by an impulse of self-preservation, would run and crouch, trembling, in the dirt. One chap, denying any fear of being hit, under heavy shelling was possessed with a barely controllable longing to get out of the din, and on sentry duty had the sensation of some one being about and would frequently challenge or be seized with an impulse to run. Occurring in these conditions were hosts of hysterical and neurasthenic manifestations which time will not permit me to do more than mention, such as loss of consciousness, functional nervous spells, severe headaches, abnormal sensations over the body, loss of the motor power of one-half of the body or of one or both limbs, diminution or loss of the sight or hearing, loss or impairment of the power of speech, abnormal sweating, pains in the stomach and about the heart, palpitation, and vomiting spells.

This outline is offered merely as a brief suggestion of the comprehensive possibilities and the necessity for trained neurologists and psychiatrists in the present great war. Depressing as are these manifold conditions, it is with intense pleasure that one sees the usually fortunate outcome of proper care, in their disappearance and the re-establishment of mental equilibrium. Under proper treatment, early instituted (and the first really opportune place is the Base Hospital) these cases make excellent, though sometimes slow progress. Nothing is more difficult to overcome than a well established neurosis. At the Base Hospital one can fairly well employ psychotherapy in the form of absolute quiet, isolation, re-education and persuasion and medicotherapy, hydrotherapy and lumbar puncture when indicated. I cannot insist too strongly upon the value of quiet, rest and isolation as practiced by placing screens, when available, between the cots in the early control of these cases. No little word of praise, either, is due to nurses, who by their careful adherence to instructions, tact and gentle care have fulfilled their noble calling. The re-education serves also as an enlightener to the examiner, as in one of my experiences, when a young Tommy who for several days had been in a stupor roused at my morning visit and gazing at the insignia on my lapel asked what the "A" meant. When informed that "A" stood for "America" he asked, "Are you an American? I thought all Americans chewed gum and had gold teeth." Reassured, he gazed toward the end of the hut. His eye lighting on the nurse, he asked: "Sister, is she an American too?" "Yes." "Does she sing rag-time?" Removed from the site of trauma, the noise and din, reassured as to their safety, after a complete rest of varied duration, the individual is almost invariably able again to resume his place in civil life, where in time he looks back upon his illness, as he himself not infrequently will say, "as a dream," or sometimes, more fortunately, has no recollection of his experience.

THE PROBLEM OF MENTAL DISEASE IN THE CANADIAN ARMY

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Of the total number of soldiers invalided to Canada, the proportion of nervous and mental cases has been fairly constant at 10 per cent, classified as follows:

1. Neurotic reactions, 58 per cent.
2. Mental diseases and defect, 16 per cent.
3. Head injuries, 14 per cent.
4. Epilepsy and epileptoid, 8 per cent.
5. Organic diseases of the central nervous system, 4 per cent.

These figures are compiled from the returns of medical boards which examine the men to determine discharge disability.

Group 1 may be subdivided as follows: (a) Constitutional neurotic temperament. More or less permanent condition aggravated during service, not necessarily at the front. (b) Somatoneuroses. Injuries and illness whether pre-existent or due to service, upon which disproportionate subjective symptoms have been built, and which often long survive the actual physical disability. (c) Specific war-reactions developing in the majority of cases at the front under stress of fighting. Predisposition is of course very often demonstrable in these cases as well. Most typical of these reactions is the so-called "shell-shock," although, to be sure, this condition in common with others of the group is made up of symptoms characteristic of the neuroses in general. From the military records it is not possible to differentiate numerically these various types, but the third subgroup far outnumbers the others.

Group 2 comprises: (a) Psychoses of familiar types, the majority, as would be expected, being dementia praecox. (b) Primary mental defect. (c) Psychopathic inferiority. This condition, easily unrecognized in routine medical boards, has been the cause of many obvious difficulties. The class includes many of the inefficient and undesirable soldiers, whose history often shows that they have made good neither in civil nor military life. They are usually the trouble makers in the convalescent homes and furnish a considerable number of the men with grievances concerning pension claims and treatment of the returned soldier in general.

Group 3 is made up mostly of cases of gunshot or shell wounds of the head, with loss of bone. Strictly considered, the majority of these cases might be omitted from the categories of nervous and mental diseases. It is very rare for a head case of this sort to present symptoms of neurosis or psychosis. Variable headache and dizziness are the only fairly constant symptoms.

In Group 4 the percentage of genuine epilepsy is not determinable from available records. Some of the cases with epileptiform convulsions turn out to be initial paresis, or dementia praecox, or a neurosis.

Group 5, the smallest of all, is made up chiefly of paresis and tabes, with rare diagnoses of brain tumor, multiple sclerosis, etc.

The program of differentiation and group treatment of nervous and mental conditions among returned soldiers in Canada includes:

1. A reception hospital for war neuroses and similar conditions, observation of doubtful states, etc. These cases are received at the Ontario Military Hospital at Cobourg.

2. An institution for the severe and chronic types of mental disease. Hitherto these cases have as a rule been sent to the provincial hospitals in their respective districts.

3. The establishment of an institution or colony for epileptics is under consideration.

4. The establishment of a center for the observation and treatment of syphilitic conditions is also contemplated. In most of the cases of paresis and tabes there is a pre-enlistment history of infection, but the evidence on the records points as a rule to the development of the disabling symptoms during service. The question of pensionability in many cases offers considerable difficulty. The importance of attention to syphilitic history and serological and neurological evidence of syphilis at examination of recruits is very obvious.

Hitherto where syphilitic treatment has been indicated in continuation of that begun overseas, this has as a rule been done in active treatment hospitals, while the later cases, such as paresis, have found their way to the provincial hospitals. An initial segregation of all syphilitic cases among returned men at a center where all the indications of observation, classification and treatment could be met is believed to be desirable.

5. Convalescent homes. These were the first institutions established in Canada for the reception of disabled soldiers and accommodate all types of convalescents. While there is but one special institution of each type above referred to, the convalescent homes are scattered throughout the Dominion and to them cases are transferred when treatment has reached a late stage and especially if it is desirable that an invalid should be in an institution in his home district.

The war reactions outnumber probably all other types of nervous disability combined and demand proportionate attention in management and treatment. At the special institution at Cobourg the following points are kept in mind:

(a) The maintenance of military discipline and individualized control is found to be of indispensable and first-rate importance in dealing with these cases.

(b) Hydro- and electro-therapeutic treatment is of considerable service in many cases.

(c) Occupation-therapy with suitable variety of work is of almost universal importance.

Treatment of a highly specialized sort has been developed under the auspices of the psychological department of Toronto University, following the plan of motor training applied by Dr. Franz at the Government Hospital in Washington. This method is found useful in certain cases of functional paralysis, incoordination, affect-inhibitions, tremors, and other kinetic disorders.

In the general policy of caring for the war neuroses it has been demonstrated over and over again, that patients while under treatment should be shifted as little as possible from one institution to another. It is also as a rule not well to have the patient in the vicinity of his home, and home visits are certainly contraindicated in the severer neuroses. The conscious will and purpose to get well are often difficult to establish and all opposing factors must be kept in mind.

SOME EXPERIENCES IN THE GERMAN RED CROSS

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IN the spring of 1914, after a five years' residence in Germany, I passed my state examinations in Heidelberg, and had just entered the department of hygiene with the intention of doing some serological work when the war began. In the general excitement that preceded the outbreak of hostilities I was prevailed upon to join the Red Cross and remained with that organization until the end of April, 1915.

Having only my memory to rely on, it is with some hesitation that I give my impressions of this nine months' service. Although changes in the medical organization must have been made since I left Germany over two years ago, I believe, however, that the basis for the final organization had been fixed before I left and that such changes as have occurred are of minor importance.

At the outbreak of the war the military hospital service was divided into dressing stations, field hospitals, base hospitals and evacuation hospitals. The dressing stations were situated behind the firing line, but within artillery range. The field hospitals were out of range of all but the heaviest artillery and were movable. The base hospitals were far inland, entirely removed from the scene of action, and the evacuation hospitals were in the vicinity of the base hospitals. The evacuation hospitals were really mere homes for convalescents, usually presided over by an elderly physician of the town or village in which they were situated and supervised by the nearest base hospital. This was the sum total of provision made for the sick and the wounded at the outbreak of the war. There were insufficient facilities for returning the men from the front, most of the wounded arriving at the base hospitals in cattle cars on straw bedding with wounds exposed and fractures often without splints.

Germany was sure of a victory within three months and as a consequence no provision had been made for specialized treatment of any kind. The situation in Heidelberg, where I was stationed, as in other university towns, was a little better than elsewhere because of the university clinics already in existence, and these clinics, having become base hospitals, naturally co-operated in exchanging their sick and wounded.

During the first part of the war, that is, up to the time of the battle of the Marne, we did not see a single mental case in our hospital, the "Vereinslazaret Stadthalle," a base hospital of 280 beds with a very active service. The psychiatric clinic in Heidelberg was half filled with ordinary wounded and there seemed to be no need for a psychiatrist anywhere. This, I believe, was due partly to the attitude of the troops, who were buoyantly sure of speedy victory, and partly to the fact that, owing to the general unsatisfactory conditions as outlined above, no attention was paid to individuals who behaved queerly. Thus psychoneuroses hardly existed and patients suffering from deeper-seated mental disorders were swept along by the multitude.

In November, with the definite departure from open to trench warfare, the picture changed. Hardly a transport of sick and wounded, and these transports arrived twice a week, did not contain its quota of mental cases. The psychiatric clinic was used only for patients with more serious mental afflictions, far from being a mere adjunct it had become so overcrowded that the psychoneurotics had to be treated in the base hospitals. Now, these psychoneurotics slowly but surely began to be a nuisance in the base hospitals that did not have a psychiatrist attached to them by accident. They were "uninteresting cases" to the men of preeminently surgical training and were sent to the evacuation hospitals, stagnated there, and finally returned to the front. At the front all their former symptoms returned immediately and they were sent back to the base hospitals. One case that I know of went through this procedure three times.

Finally the government took the matter in hand and provided each base hospital with a psychiatrist or arranged for the regular visit of a psychiatrist from a psychiatric clinic, provided one was near at hand as was the case in Heidelberg. It was the duty of this visiting psychiatrist to discuss each case with the ward doctor and to arrange for suitable treatment. The psychiatrist also dealt with the cases of plain slackers and decided what was to be done with this type. Besides this the government sent a proclamation to all base hospitals, warning against returning psychoneurotic patients to the front as *felddienstfähig*, capable of service in the field, in a haphazard way. With these steps, conditions immediately became better. Patients were kept in the base hospitals until improved, then sent home for a rest and finally assigned to garrison duty, *garnisonsdienstfähig*, near their home towns. The plain slackers were assigned to heavy labor away from home, while cases of dementia praecox, general paresis, etc., were declared unfit for duty, *dienstunbrauchbar*, and concentrated in the regular state institutions. They were, however, treated as soldiers and enjoyed especial privileges whenever possible.

As to the types of cases encountered, I can speak only of those seen in the base hospitals, all of which were psychoneurotics in the true sense of the word. It was for the interest of all concerned to remove severer affections to the psychiatric clinics as soon as possible, even if they were severely wounded. This was done in part directly from the field hospitals and was the only classification these hospitals attempted, all other sorting out being done by the base hospitals where there was time for a more thorough examination.

One type of psychoneurosis stood out before all others and was of course immediately labeled. It was called *Granatfieber*, grenade fever. These individuals, at least those that came under my observation, were usually stoop-shouldered, and narrow-chested. They had a poor physical build and a naturally weak constitution. All complained of indigestion (the hospital served good, though rather coarse food), backaches and headaches. However, they fell in with the routine pretty well and only showed symptoms when the experiences at the front were dwelt upon. Then, especially when grenades were mentioned, they immediately grew pale, trembled, and in some cases so far lost control of their legs that they fell down. After such an experience they were restless and nervous and could not sleep without hypnotics for a number of days. This reaction was not necessarily dependent upon the question of their return to the front, but could be brought about by a mere casual mention of explosions, grenades, shells, mines, etc. Unfortunately no association tests were done.

A second class that was fairly distinct consisted of those individuals who had had especially trying experiences and then simulated some internal or mental disorder for which men in their company had been sent to the rear. This simulation often persisted for months even after they were told that they were unfit for duty in the field. Thus, one of my patients had attacks of pseudo-epilepsy, so manifestly genuine that the reacting pupils during the attack and the account of his company commander was the only thing that clinched the diagnosis. He had been struck between the shoulders by a mine which did not explode. This happened a few days after a man in his company was sent to the rear on account of repeated epileptic attacks.

From this to mere slackerdom is but a step and one sees all intermediate stages. It is hardly to be wondered at, that a man who naturally has not much strength of character grows tired after months of trench life and quits, either by purposely exposing himself to the fire of the enemy, or by simulating some disorder. All such individuals were considered unfit for duty at the front. They lower the morale of their entire companies.

Quite opposite from the reaction of the naturally weak and neurotic is that of the mentally slightly deficient. The troops from Bavaria are notably brave, yet among their wounded one finds many high-grade morons. These individuals, who are wandering laborers, never settle down or get married, spend their money as they earn it, believe in the direct intervention in their behalf of certain sacred statues, that is, have an extremely low conception of religion, can just read and write, and if opportunity is offered will commit petty theft, have not proven bad soldiers.

One such individual came on my ward as unmanageable. His elbow was badly shattered and he was the proud possessor of the iron cross, quite a tribute for a private in those days. He refused medical attention, saying we were mere civilians and had no right to fuss with him or to give him orders. He scolded about the food and made himself a perfect pest by upsetting all the psychoneurotics with weird accounts of the front. He could just read and write and stole everything in sight. With all this he had been an excellent soldier. His main fear was that of not being able to return to the front on account of his stiff elbow joint. This was one of a large number of such individuals that came under my direct observation. Needless to say no especial attention was paid to their mental status; they were treated like ordinary soldiers.

These were the four main types that I encountered. Of course, there were all sorts of individual reactions. Those patients who had gone through depressions in previous years again became depressed. Hypomanic individuals became very wild and lost almost the last remnants of civilization. Such persons were most difficult to control in the first few weeks after their return from the front, unless they were so seriously wounded that they were confined to their beds. They were constantly exceeding the time limit of their leave, getting drunk and making other kinds of disturbance. After a rest in the hospital for a period of time they usually calmed down again and became manageable. All these facts agree with our modern psychiatric view of the specific reaction of each individual.

THE EFFECTS OF HIGH EXPLOSIVES UPON THE CENTRAL NERVOUS SYSTEM

A REVIEW OF MOTT'S LETTSOMIAN LECTURES, 1916, AND G. ELLIOT SMITH'S "SHELL-SHOCK AND ITS LESSONS"

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MOTT'S Lettsomian Lectures, delivered before the Medical Society of London in February and March, 1916, contain much of interest. Mott is now a temporary major in the R. A. M. C. and has been in contact with cases at the Fourth London General Hospital.

So terrible is modern trench warfare that "a neuro-potentially sound soldier in this trench warfare may, from the stress of prolonged active service, acquire a neurasthenic condition." Aside from these acquired cases, "if in a soldier there is an inborn timidity or neurotic disposition, or an inborn germinal or acquired neuropathic or psychopathic taint, causing a *locus minoris resistentiae* in the central nervous system, it necessarily follows that he will be less able to withstand the terrifying effects of shell fire and the stress of trench warfare."

There are three effects of high explosives upon the central nervous system. First, instant fatalities from violence or burial (instant death has occurred in groups of men from shell fire, also, without visible injury); secondly, non-fatal wounds and injuries of the body, including the central nervous system (a large number of these cases never show the so-called shell-shock); and thirdly, injuries of the central nervous system without visible injury.

Mott includes the functional neuroses and psychoses in this last group despite the non-existence of discoverable lesions, proceeding on the familiar argument that these psychic traumata "must imply a physical or chemical change and a break in the links of the chain of neurones which subserve a particular function." Even such a symptom as mutism, a symptom as suddenly lost as it is acquired, is grouped here by Mott.

The causes of shock to the nervous system are these:

a. Cerebral concussion by direct aerial compression;

b. Indirectly from aerial compression by blowing the subject into the air or against the side of the trench or dugout;

c. By blowing down of parapet or roof or by blow by sandbag;
d. Burial and partial asphyxiation;
e. Carbon monoxid poisoning, CO generated by high explosives.

All these conditions might readily produce structural diseases of the nervous system without visible external injury.

Mott quoted Lord Sydenham, that the forces generated in shell explosions are sufficient to cause instantaneous death. Since the cerebrospinal fluid is incompressible, the enormous aerial compression generated in the detonation of high explosives, may, according to Mott, "be transmitted to the fluid about the base of the brain and cause shock to the vital centres of the floor of the fourth ventricle, causing instantaneous arrest of the functions of the cardiac and respiratory centres."

There is an alternative explanation to the effect that sudden atmospheric depression occasioned by shell explosion might liberate air suspended in the blood, transforming it into bubbles of gas which would be driven into the capillary vessels and cause instant death. Mott, however, believes that the death without visible injury following aerial concussion is due to the sudden arrest of bulbar centres.

Mott reviews the neurone doctrine, laying great stress upon the von Monakow theory of diaschisis, summarizing briefly his own work upon the dark field appearances of nerve cells, and concluding that severe concussion "can not only cause immediate dissociation of the cortical perceptor neurones, producing unconsciousness or a disturbance of consciousness, but for a varying period of time it can destroy the power of recollection of perceptions prior to the shock." Mott attributes this loss of recollection to "dissociation of the higher association systems of (pyramidal) neurones, which form a sheath of cells of three layers, covering the whole cortex cerebri." In a case of complete loss of consciousness, there is a complete dissociation of all the afferent projection fibres of subcortical neurones from the perceptor systems. Since much depends upon the oxygen tension of the fluid, "a violent emotion such as fright can, by its influence upon the vasomotor centre and the heart's action, causing a fall in the blood pressure, produce an important lowering of the oxygen tension in the fluid, and therefore a suspension of function of the intercalary neurones of the cortex, followed by dissociation of the cortical perceptors and loss of consciousness." Cortical blindness, deafness, mutism, paralysis, are, briefly stated, symptoms of cortical dissociation. The headache, weariness, loss of power of concentration, irresolution, and mental fatigue, are interpreted as due to an inability to renew nervous energy automatically as fast as it is used.

With respect to the instantaneous death of groups of men in the so-called "valleys of death," Mott quotes theories of M. Arnoux and of Surgeon General Stevenson. Leonard Hill is quoted to the following effect: "Explosion of a big shell in a trench, dugout, cellar, or other confined space, must, I think, instantly deoxygenate the air and produce a high concentration of nitrogen. The inspirations of a man at the time of explosion may introduce enough of these gases to cause death from want of oxygen. If he is fatigued, his muscles will be in the condition to go into rigor on the sudden deprival of oxygen."

Mott's second lecture deals with carbon monoxid poisoning, calling attention to the characteristic loss of memory therein. He calls attention to the identity in appearances in the brains of certain workers poisoned in industrial life (in carbonyl of nickel works), and men killed in shell-shock. Photographs are presented demonstrating this identity, and in particular the capillary punctate hemorrhages of the corpus callosum in the industrial and military cases. The shell-shock brains have been sent on for examination from the mobile laboratories or the casualty clearing stations. Photographs are presented of cell changes, also due to carbon monoxid poisoning.

The signs and symptoms of shell-shock "are various, and with the exception of the prolonged effect on consciousness and memory in severe cases, accord in the main to those of the two common types of functional neuroses: hysteria and neurasthenia."

A large majority of shell-shock cases occur in persons with a nervous temperament, or persons who were the victims of acquired or inherited neuropathy. In some of the acquired cases, the shell-shock effect occurs only after a third or fourth experience and after a continued spell of stress and anxiety. General paresis may be brought on by the *commotio cerebri.*

Persons developing epilepsy as a result of shell-shock are nearly always persons who have previously suffered from true epilepsy or epileptoid phenomena, or persons with a history of epilepsy or insanity in the family. A medical research committee has been at work especially on this matter from the standpoint of allotting compensation. According to Mott, epilepsy is "of all nervous diseases the one in which an inborn tendency is shown more than in any other nervous affection," and he believes that shell-shock is not *per se* the cause of epilepsy in the majority of cases. Out of 156 cases with a previous history, 52 epileptics gave a history of previous nervous breakdown or a timid disposition. In fact, "an acquired or inborn tendency to neurosis plays an important part in the effects on the central nervous system in exposure to shell-shock in the majority of cases." It appears that from the point of view of compensation or pension, the War Office authorities regard shell-shock as a definite injury although there may be no visible sign of it. We have to face the fact that "the notion of never recovering may become a fixed idea," just as in liability cases in the industrial field.

There are cases of automatic wandering and temporary mental confusion which belong in this group. Peculiar cases of limited amnesia are cited, particularly cases of alteration of musical memory. The effects of terrifying dreams are described, especially their relation to fear.

The most frequent speech defect is mutism, about one in twenty of the shell-shock cases suffering therewith. Most of these cases are able to write out a lucid account of their experiences. On account of the sudden and varied manner in which the mutes recover their power of speech and intonation, Mott believes the mutism is due to a refractory condition of the voluntary cortical mechanism of phonation.

An analysis of the terrifying dreams of the soldiers shows that their fear is, to use Mott's phrase, "contemplative," and that the fear is through imagination continually operating, consciously and unconsciously. Mott believes it is this terror in continual operation which induces the refractory phase in the structures controlling phonation. Attention gets centred consciously and subconsciously on the "fixed idea" of the paralysis of phonation.

The commonest headache is occipital and nuchal, being often described as a helmet-like compression (the "helmet of Minerva"). The headaches may attend the efforts of a mute man to speak or a deaf man to listen. There is a variety of cortical, vasomotor, and sensory disturbances. Functional deafness and functional deafmutism occur, and in the latter event, either speech or hearing may return first.

In the acute stage of shell-shock, the victim is rather apt to complain of smoky vision, and there may be also failure of accommodation and sluggish light reflexes. There are some cases of functional blindness. Defensive tics and pantomime movements in sleep (as if to ward off a blow) are described. Tremors constitute a serious disability. A case of severe functional tremor completely cured by suggestion is given. Paraplegia, as also hemiplegia and monoplegia, occur in shell-shock cases. The fixed idea of the paralysis has been often suggested to the patient by what happened to him at the time of the shock. Mott is instituting a museum of crutches, sticks, and other supports of patients admitted from hospitals where they had been many weeks and months, only waiting to be assured that there was nothing the matter with them. "Be cheerful and look cheerful is the note which should ever be sounded to these functional cases. Sympathy should not be misplaced although it should be shown to all these poor fellows who have a fixed idea of never recovering. . . . I do not find hypnosis or psychanalysis necessary or even desirable. . . . The conditions at the Maudsley Hospital will be all that can be desired. There are light, airy wards, and dayrooms for meals and recreations, plenty of single rooms for the isolation of cases that are troubled by noises or require separate attention; and especially valuable are the baths, so that every soldier can get a warm spray bath every day. The warm baths, and especially the continuous warm baths, of which there are eight, are especially valuable."

Mott also stresses diversion with books, games, and music.

An interesting foil to Mott's Lettsomian Lectures is the Manchester University publication entitled "Shell-Shock and Its Lessons." * The authors are a physician and a psychologist. The physician, G. Elliot Smith, is the eminent Dean of the Manchester University Faculty of Medicine and an authority on embryology of the brain and the anthropology of the Egyptians; the psychologist is T. H. Pear. The book is dedicated to Major R. G. Rows, whose point of view with respect to the treatment of shell-shock is commended. The greater part of the book is devoted to general considerations supporting the functional point of view in the treatment of the psychoneuroses. "Precisely in those cases of psychoneuroses which yield to psychic treatment, there is no anatomical, pathological or chemical evidence of inheritance. . . . While the contributions of anatomy, physiology and pathology to the treatment of psychoneuroses have

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*Smith, G. Elliot, and Pear, T. H., "Shell-Shock and its Lessons," Manchester University Press, and London and New York, Longmans, Green & Co., 1917; 135 pages.

not yet gone beyond theoretical and mutually conflicting suggestions, the psychological method of investigation and treatment, on the other hand, has proved itself of practical use to returning patients to the normal state of health. . . . The psychoneurosis is often simply a progressive state of mal-adaptation to environment—a mental twist which can be corrected if treated suitably at a sufficiently early age.

"While it is indisputable that the psychoneuroses, like all mental phenomena, have a material basis . . . to sit with folded hands and wait for the advancement of our knowledge of anatomy, physiology and bio-chemistry would be fatuous, when there are other and more direct means of treating the numerous and often pathetic cases which urgently call for cure."

The inadequacy of the term "shell-shock" is acknowledged but the term seems to have taken hold as against the more satisfactory, but less widely employed term, "war strain."

We must look in the emotional sphere rather than the intellectual sphere for the explanation of these conditions, characterized by instability and exaggeration of emotion.

The method of visiting patients in the wards, adequate as it is for the care of physical injuries, is insufficient for mental cases. Shell-shock can occur in a person in perfect physical and mental condition. How long he stays in the trenches depends upon himself, namely, upon his temperament, disposition and character.

Loss of sleep is followed by pains, unpleasant organic sensations, hyperaesthesia, irritability, emotional instability, inability to fix attention, loss of self-control. The absence of external manifestations proves nothing. Fear and other emotions are suppressed. The suppression of emotion is exhausting. In modern warfare the soldier cannot always give vent to pent-up emotion by charging the enemy. Finally collapse occurs when a shell bursts in the air, even though there be no actual contact with missiles, earth or gases. Loss of consciousness is common, and upon recovery there are often very severe immediate disorders of sensation, emotion, intellect and will.

Then follows an enumeration of the now well-known phenomena of shell-shock, blindness, deafness, dumbness, contractures and subjective disorders. The strangely dramatic cures of these cases were among the most startling phenomena of the war. Two functionally mute patients were cured upon hearing that Rumania had entered the war. Another was cured by a view of Charlie Chaplin. However, many cases are not so simply cured, and the greater part of this book is devoted to the lessons drawn from the necessity in many cases of more elaborate treatment, especially treatment by psychological analysis and re-education.

Many quotations are made from the work of Déjerine and Gauckler (The Psychoneuroses etc., translated by Jelliffe). Gaupp is quoted to this effect: "There is no justification for calling every instance [of war hysteria] a case of malingering or simulation. There are quite capable men of irreproachable character whose nervous system is positively unfit for the hardships and horrors of war." Some of these, it is said, take refuge in disease.

As to treatment, the necessity of early measures is stressed. As to firmness and sympathy, even were these milder psychoses to be regarded as varieties of simulation, still the method of firmness is hardly calculated to meet malingering. However, mere sympathy of the "cheer up" or "forget it" variety is not to the point.

Isolation may work in some cases, but isolation even accompanied by rest and over feeding is never enough. In any event, the situation with soldiers is quite different from that of civilians. The value of suggestion and hypnosis is unquestioned. C. S. Myers has relieved acute symptoms in recent cases of shell-shock by hypnosis. In general, however, the results of hypnotic treatment may be described as brilliant but erratic. The same may be said of electricity as a treatment for the vocal cords in hysteric aphonia. There is a certain value to work. This must be prescribed as a sequel to (not as a substitute for) the performance of work by the doctor. There is, however, an individual and personal essence to any particular example of shell-shock.

Just as butchery is not anatomy, so the ordinary methods of psychological analysis by alienists are not the true methods. To say that a man is suffering from a delusion of persecution or a fear of open spaces is merely a carving-up of his mind. What we must rather get at is the interpenetration of these beliefs with the rest of his mental life. The history of the delusions is in point. Moreover, psychological analysis is not the mechanical kind of thing suggested by anatomy; chemical analysis is a better analogue.

Jung's view of a neurosis as a failure of adaptation is favorably quoted. It is not necessary to subscribe to any one doctrine of psycho analysis. The term "analysis" should hardly be applied to the theories that underlie and determine the process of re-education. Perhaps the term should be reserved for the diagnostic method rather than for any given theory supposed to underlie the process. "The ultimate lines on which an ideal diagnostic analysis and curative re-education will be possible are yet undefined."

Chapters IV and V are devoted to general considerations and lessons. The British attitude to psychiatry is severely arraigned. "The community treats the sufferer well when, but *not before*, he has become a 'lunatic.' That is the British procedure today."

American work upon the borderline cases, as at the Psychopathic Hospital in Boston, is cited somewhat at length.

It appears that the Medico-Psychological Association of Great Britain and Ireland had issued an elaborate report on this matter by a committee appointed in November, 1911. Then the war stepped in and made the problem even more disturbing. "If the lessons of the war are to be truly beneficial, much more extensive application must be made of these methods (the institutions for borderline cases) not only for our soldiers now, but also for our civilian population for all time."

Abraham Flexner's report on medical application in Europe is quoted. It seemed that precisely what the English and French medical education have to their credit, namely, an extraordinary practicality, is completely left out of the teaching of British psychiatry. Flexner showed that German education in its clinical instruction was overwhelmingly demonstrative; that is, students *saw* and *heard* but almost never *did*. How strange it is that German psychiatry should be so much more practical a matter than the psychiatry of England, which in general, is the home of practicality.

"The most depressing aspect of the present state of affairs is the comparative absence of all research."

The chief functions of a psychiatric clinic for early and incipient mental disorder staffed by skilled specialists are:

(1) Attendance on the mentally sick;

(2) The provision of opportunities for personal intercourse between patients and the psychiatrists in training;

(3) The theoretical and practical instruction of students;

(4) Advising general practitioners and others who are faced with difficult problems arising in their daily work;

(5) To serve as a connecting link between investigation in the large asylums and that in the anatomical, pathological, bacteriological, biochemical, psychological and other laboratories of the universities;

(6) The scientific investigation of the mental and bodily factors concerned in mental disease;

(7) The furtherance of international exchange of scientific knowledge concerning mental disorder, by the welcome accorded to visitors from other countries;

(8) The dissemination of medical views on certain important social questions and the correction of existing prejudices concerning insanity;

(9) When necessary, the after-care of the discharged patient.

The Henry Phipps Clinic in Baltimore, and the Munich and Giessen Clinics in Germany are mentioned. The one good step in England in this direction is the establishment of the Henry Maudsley Mental Hospital. In 1849, a visiting committee of Hanwell Asylum suggested reform "but the dust lies thick upon this volume published a long time before the Crimean, not the present, war."

MENTAL DISEASE, SUICIDES AND HOMICIDES IN THE UNITED STATES ARMY AND NAVY, 1897-1915

Prepared from the Annual Reports of the Surgeons General

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Table I

Rates per 1,000 of insanity admissions, enlisted men, United States Army, 1897 to 1915, inclusive

Year	For average total enlisted men	For enlisted men in U. S. proper (exclusive of Alaska)	For enlisted men in Philippines (not natives)
1897	....	.83	....
1898	1.08	1.24	2.07
1899	1.78	1.72	2.97
1900	2.72	1.30	2.79
1901	1.79	1.28	2.04
1902	1.71	1.26	2.47
1903	1.06	1.02	1.05
1904	1.69	1.71	1.75
1905	1.62	1.61	1.45
1906	1.49	1.33	2.02
1907	1.88	1.79	1.88
1908	1.50	1.58	1.09
1909	1.61	1.63	1.56
1910	1.59	1.58	1.87
1911	1.73	1.68	2.01
1912*	3.45	3.26	3.56
1913*	3.44	2.92	4.83
1914*	4.18	3.83	6.24
1915*	3.82	3.04	7.27

* "Mental Alienation" includes several conditions not included under the term insanity used previously, such as defective mental development, constitutional psychopathic state, hypochondriasis, and nostalgia.

Table II

Suicides and homicides, enlisted men, United States Army, 1897 to 1915, inclusive

Year	Mean enlisted strength	Suicides		Homicides	
		Number	Rate per 1,000	Number	Rate per 1,000
1897...........	27,374	10	.37	..	....
1898...........	147,795	38	.26	19	.13
1899...........	105,546	30	.28	23	.22
1900...........	100,389	42	.42	28	.28
1901...........	92,491	..	....	..	....
1902...........	*80,778	..	....	..	....
1903...........	†67,643	34	.50	9	.13
1904...........	60,139	27	.45	10	.17
1905...........	58,556	31	.53	20	.34
1906...........	58,572	39	.67	9	.15
1907...........	54,949	26	.47	17	.31
1908...........	67,515	39	.58	22	.33
1909...........	75,399	33	.44	15	.20
1910...........	71,814	31	.43	16	.22
1911...........	73,023	46	.63	18	.25
1912...........	79,613	54	.68	20	.25
1913...........	81,697	42	.51	17	.21
1914...........	88,133	44	.50	25	.28
1915...........	94,729	50	.53	21	.22

* Includes 4,826 native Filipinos.
† Includes 4,789 native Filipinos.

Table III

Comparison of admissions for insanity and epilepsy, enlisted men, United States Army, 1903 to 1915, inclusive

Year	Insanity		Epilepsy	
	Number	Rate per 1,000	Number	Rate per 1,000
1903...............	72	1.06	83	1.23
1904...............	99	1.69	128	2.18
1905...............	92	1.62	133	2.34
1906...............	84	1.49	112	1.98
1907...............	101	1.88	122	2.27
1908...............	98	1.50	159	2.43
1909...............	120	1.61	129	1.74
1910...............	114	1.59	115	1.61
1911...............	126	1.73	126	1.73
1912...............	*270	3.45	91	1.16
1913...............	*278	3.44	116	1.44
1914...............	*365	4.18	108	1.24
1915...............	*358	3.82	114	1.22

* "Mental Alienation." See note, Table I.

Table IV

Suicides, homicides, and admissions for mental alienation and epilepsy, enlisted men, American Army, 1912 to 1915, inclusive

Year	Mean enlisted strength		Mental alienation		Epilepsy		Suicides		Homicides	
	Adjutant General's report	Surgeon General's report	Number	Rate per 1,000	Number	Rate per 1,000	Number	Rate per 1,000	Number	Rate per 1,000
1912.....	79,613	78,267	270	3.45	91	1.16	54	.68	20	.25
1913.....	81,697	80,766	278	3.44	116	1.44	42	.51	17	.21
1914.....	88,133	87,228	365	4.18	108	1.24	44	.50	25	.28
1915.....	94,729	93,262	358	3.82	114	1.22	50	.53	21	.22

Rates for mental alienation and epilepsy are computed upon the average enlisted strength as shown by the Surgeon General's reports, while rates for suicides and homicides are based upon the strength according to the reports of the Adjutant General.

Table V

Insanity admissions, suicides and homicides, Navy and Marines, 1909 to 1915, inclusive

Year	Mean enlisted strength	*Insanity		Suicides		Homicides	
		Number	Rate per 1,000	Number	Rate per 1,000	Number	Rate per 1,000
1909............	57,172	145	2.61	17	.30	..	...
1910............	58,340	186	3.16	20	.34	7	.12
1911............	61,399	214	3.48	22	.35	..	...
1912............	61,897	201	3.39	16	.25	7	.11
1913............	65,926	285	4.32	14	.21	5	.08
1914............	67,141	276	4.11	21	.31	4	.06
1915............	68,075	190	2.79	21	.30	1	.01

* Rates for insanity admissions are computed upon average strength as shown by returns from medical department.

NEURO-PSYCHIATRY AND THE WAR

A BIBLIOGRAPHY WITH ABSTRACTS

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In order that the psychiatrists and neurologists who are now taking their places in the neuro-psychiatric hospital units that are to be attached to the base and other military hospitals of the United States Government may have at hand the latest information as to the special problems to be met in the army camps, abstracts of articles dealing with the psychiatric aspects of the war are being gathered or prepared as rapidly as possible. In the preparation of these abstracts the English, Canadian, French, Italian, Russian, Australian and German journals, in so far as the latter are available, are being consulted. It is possible to present in this number of MENTAL HYGIENE but a small portion of the abstracts already prepared. It is hoped that it will be possible to publish the additional abstracts and those that will be prepared from time to time as supplements of MENTAL HYGIENE. These supplements will be furnished to the officers in the field and to others who may be interested.

Astwatsaturow, M. I. Mental Diseases in Regard to the Conditions of Military Service; Statistical Data of Mental Disease in Various Armies. Wojenno-Medicinski j., Sept. 1912

An able discussion of the statistics of the subject by the noted Warsaw psychiatrist. He admits that garrison and field service have the elements to favor the development of mental disease, especially in those hereditarily predisposed, but he also points out that on the other hand the regulated life in the army will prove to others a boon as regards their general health. Professor Astwatsaturow rejects all relative statistical data with reference to the civil population, because in the army all cases, even those of a mild or borderland character, are at once recorded, while in civil life none but the frankly pronounced cases become a matter of record. On the other hand, it must be considered that in the army we have to deal with a class of young men especially selected for their health and development, while the civil communities contain all sorts of defectives. In studying the statistical data of practically all European armies, Aswatsaturow compares the favorable result of compulsory service as against voluntary service by citing France. Here the figures speak in strong terms and tell us that when the army has ceased to become a refuge for those unable to cope with the struggle for existence in civil life, the condition of the troops from a neuro-pathologic standpoint improves wonderfully. To this day the colonial troops in Africa show twice as many ineffectives as the French army at home. As regards the influence of war, the author cites the Spanish-American war for the American army. The difficulties of a campaign are directly responsible for increased admission of mental diseases. The same could be observed in the German army before, during and after the war with France, though the increased admission rate was not quite as pronounced as with the American forces. While limiting the present article to the statistical side of the problem, it is apparent from a casual remark that the author favors short terms of enlistment.—Mil. surg. 33: 467, Nov. 1913.

Auer, E. Murray. Phenomena Resultant upon Fatigue and Shock of the Central Nervous System Observed at the Front in France. Med. rec. 89: 641–44, April 8, 1916

"The manifestations of disordered function of the central nervous system resultant upon fatigue and shock occurring in the present war are of uncommon interest, having as they do for their etiology a more or less common factor, i. e., 'a mine explosion' producing its varying effects upon the number involved, and because of their great variety, illustrate strongly the matter of 'the individual equation' in reaction and resistance to outside influences.

"The functional nervous and mental disorders studied included those resulting from the general fatigue of duty and long marches, exposure, loss of sleep, terror, and 'shock,' which latter cases depended upon the activity along the firing line such as 'mine explosions,' charges, and shell explosions in the immediate vicinity of the individual without causing any apparent physical trauma.

"The symptomatology occurring as a result of these traumatic influences included disordered activity of the psychic, special sense, sensory and motor elements, invariably in combination with one phenomenon of disordered function accentuated."

Among mental and nervous states resulting from severe shock have been the following: hyper- and hypo-mental activity, characterized by increased motor and psychical activity such as playfulness, grimacing, flight of ideas, distractibility and rhyming of an acute mania; stupors, muscular rigidity, active deep reflexes, apathy and indifference; tremor and shaking; disturbances of memory ranging from simple forgetfulness to lapse of unconsciousness; dementia praecox precipitated by existing conditions of stress; inability to sleep and horrible trench dreams; neurasthenia; psychical pains; disturbance of organic functioning; vasomotor disturbances; abnormal sensations of all kinds and dyesthesia; loss of motor power, both of gradual and acute onset according to the nature of the shock; impairment of vision, resulting from prolonged fatigue or sudden shock; auditory disturbances of a hyper- or hypo-sensitive nature; hesitancy and loss of speech, and various kinds of tics.

Inquiry into the early history of the cases studied resulted, without exception, in the discovery of earlier neurotic manifestations. Physical examination showed nothing unusual other than stigmata of degeneration. Treatment consisted in isolation and absolute rest, with corrective measures and psychotherapy.

Auer, Max. Statistics and Symptomatology of the Mental Disturbances Occurring in the Navy, Especially Catatonia, Pathological Intoxication, Imbecility, and their Legal Determination. Archiv für Psychiatrie und Nervenkrankheiten 49: 265–316, Dec. 1911

This article serves to illustrate what is being done in special psychiatrical work in the German navy. Various cases are quoted, expert opinions given, and conclusions drawn. The paper is of local rather than general interest, but as an example of painstaking psychiatric work among a special class, it is of distinct general value.—E. W. Taylor in J. of Nervous and Mental Disease 39: 494, July 1912.

Beaton, Thomas. Some Observations on Mental Conditions as Observed Amongst the Ship's Company of a Battleship in War Time. J. of Royal naval med. service 1: 447–52, Oct. 1915

A very interesting psychological analysis. It begins with a description of the type of men who composed the ship's company and the influence of their previous environment. Passing then to a consideration of the nature of the influences to which they were subjected and the consequent reactions, the writer divides the time covered by these influences into three periods: First, a period of prolonged and monotonous stress during the four months that the ship was lying in an exposed position on the East Coast; second, a period of sudden and increased stress, amounting to two days, while the ship was at sea; and last a period of quiescence while the ship was lying in a protected harbor. The writer describes with vivid analysis the critical four months in which the men passed from patriotic eagerness and pleasure in their new duties to the sorting out of friends and acquaintances, to loss of novelty and merging of individuality in component of ship's company, to automaticity in duties, to mental attention to remote matters, such as duration of war, to loss of intelligent anticipation, to unstable apathy, with nothing left to think about, when routine becomes an ever increasing stress and morbid tendencies develop, resulting in mild neurasthenia with hypochondriacal tendencies. Arrived at this stage of minor accidents all had a mental sequence of some kind. The conclusion can only be that lengthy periods of such character as the first four months should be prevented if possible. That the results were not more regrettable than they were can only be due to the standard of the men and their fine morale.—Mil. surg. 37: 608, Dec. 1915.

Bispham, Maj. W. N. Malingering: Nervous System. Mil. surg. 34: 220–21, Mar. 1914.

"Next comes the simulation of nervous diseases. A large field and much worked over by this class of patients. This will run from convulsion to maniac insanity and will test the doctor's powers of observation to the utmost. Convulsive seizures and simulated epilepsy, after the deception has been detected, can be treated only by making the patient uncomfortable during a fit and letting him thoroughly understand that you are certain he is a malingerer.

"The insane man, so-called, is very hard to treat and each case must be handled on its own merits.

"When the case is a simulation of mania he should be controlled by restraint apparatus and treatment such as ice baths instituted. All of these cases, though, have to be observed very carefully for some time before the attendant can be satisfied in his own mind that the man is not insane.

"Where melancholia or delusional insanity is simulated a careful isolation of the patient on liquid diet and denial of all reading matter will frequently produce a cure. A suspect must be watched continually without his knowledge and every move noted. After several weeks a magazine may be left on his bed or an attendant may converse with him on the news of the day. Very few can stand the isolation without reading or talking and soon break down under treatment."

Three cases are cited.

"In conclusion I would state that the detection and treatments of malingerers of all kinds requires careful study, and no doctor, particularly in the army, is justified in jumping at conclusions without thorough examination. It is frequently noticed that where a doctor is known to thoroughly examine all cases malingerers are few and unimportant."

Bost. med. and surg. j. 175: 805–06, Nov. 30, 1916. Acute Psychoses of War (Editorial)

It may be accepted without necessity for verification that the intense emotional strain associated with warfare causes acute exacerbations of some of the milder psychotic and borderland cases which were able to get along unnoticed under the less stringent requirements of civil life. Thus, cases of arrested dementia praecox, the neuroses and psychoneuroses, cyclothymia and high-grade imbecility may all be found among recruits who have been mustered in without any suspicion that such conditions existed.

Dr. Arturo Morselli, consulting neurologist to the First Army of Italy, in a lecture to the Royal Medical Academy of Genoa, classified the mental cases which he believed originated directly from the emotional excitement of battle into seven kinds, all of which he thinks have a basis of "asthenia." The term is, of course, extremely general in its English connotations. These varieties of mental disorder he gives as acute asthenia, hysteria, depression, stupor, hallucinations, confusional states and maniacal excitement. Probably, according to the American method of classifying mental disease, we should call the first two of these conditions psychoneuroses. The depression and the excitement we should expect to find in individuals of a manic-depressive make-up, that is, the extroverted type, while the introverted type would show the stupors and the confusional states. Morselli speaks of transient hallucinations, which, of course, may arise in persons with feeble psychic resistances, that is, imbeciles, psychopaths and constitutional inferiors, from stimuli inadequate to others normally constituted—small amounts of alcohol, slight infections, mild fevers, abstention from food for short periods, and unusual emotional stress.

The modern idea of such deviations from the normal is that they are the expression of an underlying biological defect. To the experienced observer, such cases would not, as a rule, give rise to any great difficulty in diagnosis when they presented themselves for enlistment. The life history, as given by the applicant himself, is very suggestive to the alienist; his record with the Binet-Simon, Yerkes-Bridges, Healy, Fernald and other tests, his neurological examination, all supplemented by several days' observation of him, might result in the elimination of much rotten timber which later on becomes a problem to the army in the field.

The solution which suggests itself is to have a trained psychiatrist available for consultation at every recruiting station, especially in times of war.

Bost. med. and surg. j. 175: 803–04, Nov. 30, 1916. Need for Psychiatrists in the Army and Navy (Editorial)

In all the talk of preparedness it should not be forgotten that the medical branch of our military organization should be so equipped as to be able to meet any demands upon it, especially those demands arising out of the peculiarly stressful conditions incident to actual warfare. Of course we are accustomed to think of the army or navy doctor as first of all a surgeon. He must be capable of handling the cases as they come from the front—the gunshot wounds, the bayonet stabs, the burns and the broken bones. Stationed at a lonely post in time of peace, far away from any civilian physician, he must be prepared for any emergency—to reduce a dislocated shoulder, to operate upon a strangulated hernia or a gangrenous appendix.

To their credit be it said that the personnel of the medical branch of our service is composed of men who are amply equipped, not only as surgeons, but as internists. When we consider that every one of them has had, besides his four-year medical course, a year, at least, in a general hospital and a year of postgraduate work in the Army or Navy Medical College, their high average of efficiency is explained. And yet there is one branch of medicine which it would seem should be recognized as too complex and too important to be left entirely to men who necessarily must be able to give only a small part of their studies to it. We refer to mental disease. It is hardly possible for the army or navy surgeon, speaking generally, to acquire a sufficient knowledge of psychiatry to do justice to such cases of mental disorder as develop naturally and sporadically under service conditions or burst into being endemically under the nervous strain of battles. The frequency of mental disease among soldiers and sailors, as well as the necessity for its adequate study, is becoming appreciated and has been written on by Bouchard, Granjux, Hanry, and Rayneau in France; Borovikoff in Russia; Schultze and Heuse in Germany; and White, Richards, Smith, King, Woodson and Sheehan in the United States. It has been only comparatively recently, however, that the necessity for establishing a field hospital for the care of such cases has been understood. The first hospital of this kind was organized in Harbin during the Russo-Japanese War.

The desirability of having their medical officers better equipped for the handling of such cases is, at present, recognized by both branches of the service; and at the Government Hospital for the Insane every winter the Superintendent, Dr. White, gives a series of lectures to the members of the Army and Navy Medical Colleges. Also it has been the custom for some years past to detail one man from each service at the Government Hospital for the Insane, to study mental disorder for two years at a time. An officer recently detailed there, Capt. Edgar King, has published an interesting account of his studies of mental disease in soldiers. In this, among other things, he calls attention to the fact that one-fifth of all soldiers discharged are discharged on account of mental disability.

But striking as is the prevalence of mental disease among our soldiers and sailors in times of peace, we must remember that this would be greatly increased during war. Such, at least, has been the experience of the nations now in conflict, as evidenced by the many reports of mental and nervous affections which reach the medical press. Injuries of the central nervous system, due to the wind of explosives, hysterical aboulias developing in the heat of battle, hypomaniacal outbursts in protracted battles, nerve injuries by missiles, malingering of mental symptoms to escape active service, hypochondriasis and neurasthenia in recruits—all these and many more will call for the intervention of the trained neurologist and psychiatrist. As White says, "A man may be quite able to get along all right—in fact, to perform his duties with marked efficiency in time of peace,—who would break completely under the stress of war. This has long been realized as true of the physical, but we must begin now to realize it as equally true of the mental, especially as the game of war comes more and more to be played with brains."

Butts, Heber. Insanity in the Navy. U. S. naval med. bull. 4: 459–75, Oct. 1910. Illus.

This article covers admissions of insane men of the Navy and Marine Corps into the Government Hospital for the Insane from January 1, 1899, to June 1, 1910.

"The mental patrimony of many of the insane men of the navy was squandered by their dissipated ancestors long before they entered service; others began life well, but their mental capital was limited, and in the struggle for existence it was nearly all expended prior to their entry into the service, so that they really enlisted as psychopaths. These psychopaths have, for the most part, been the shiftless, irresponsible men of the service. Prior to their enlistment an unduly large proportion of them have been professional tramps or hoboes, and after their entry into the service, they become malingerers and general court-martial prisoners."

Usually insanity becomes apparent within a comparatively short time after enlistment. In most cases the mental disorder, or predisposition thereto, exists prior to enlistment or is due to causes not in the line of duty, such as alcohol or syphilis.

The recovery rate of insane men in the navy is much higher and the death rate much smaller than in the case of the insane coming from civil life. Nearly seventy per cent of the insanity in the navy occurs in men under thirty years of age, probably because the majority of men in the navy are under that age limit. Of the foreign born, Ireland furnishes a conspicuously large number of insane men, and for that reason great caution should be exercised in enlisting the Irish. The Germans show the best mental make-up. The percentage of privates in the navy is relatively small, but the percentage of privates becoming insane is relatively large, probably due to the fact that the recruiting work for the U. S. Marine Corps is performed largely by civilian physicians, many of whom fail, from lack of experience, to appreciate at all the type of men desired. The following table gives the forms and percentages of the psychoses in the navy as diagnosed by hospital authorities:

Psychoses	Number	Per cent	Whole hospital admissions, fiscal year 1909
Dementia praecox	177	33.52	237
Manic-depressive(circular, recurrent)	43	8.14	72
Acute melancholia	90	17.04	
Acute mania	37	7.01	
Acute dementia	13	2.46	
General paresis	27	5.11	50
Chronic melancholia	15	2.84	
Epileptic psychoses	11	2.08	16
Confusional insanity	12	2.27	
Imbecility	9	1.70	8
Paranoia	7	1.33	38
Chronic dementia	4	.76	
Traumatic insanity	3	.57	1
Chronic mania	1	.19	
Organic dementia	1	.19	
Terminal dementia	1	.19	
Delirium tremens	2	.38	
Alcoholic hallucinosis	5	.95	
Acute alcoholism	1	.19	
Korsakow's psychosis	1	.19	
Intoxication psychoses			
Alcohol	16	3.03	54
Morphine	2	.38	1
Cocaine	2	.38	1
Potassium bromide	1	.19	2
Cerebral syphilis	2	.38	5
Infection—exhaustion psychoses			
Malaria	2	.38	
Typhoid fever	1	.19	
Confusion in a degenerate	1	.19	
Hysteria with depression	1	.19	9
Psychasthenia	1	.19	4
Involution melancholia	1	.19	9
Acute hallucinosis	1	.19	2
Depression in a psychopath	1	.19	5
Acute psychosis in a psychopath	1	.19	
Unclassified excitement	1	.19	15
Not insane	14	2.65	11
Not yet diagnosed	20	3.79	
Total	528	100.00	

Another table shows percentage of causes, with alcoholism much the most frequent. Heredity, syphilis and sunstroke are exciting causes in inferior individuals.

Tables showing cases of insanity existing prior to enlistment, and miscellaneous data about family, former life, etc., of patients, prove that candidates for enlistment should be subjected to mental tests, or a period of several months' probation, and to an examination as to personal history before being accepted. "The service oftentimes secures, as the result of such neglect, an utterly worthless recruit who is quite capable of costing the government two or three times what the four years' enlistment of a desirable man costs, to say nothing of the annoyance of a worthless recruit to other officers in the way of inefficiency, court-martials, surveys, transfers to hospitals, and medical care and treatment." More care also should be exercised in excluding syphilitic and parasyphilitic individuals, and in furnishing for the personnel of the navy diversions and recreation with a view to lessening the desire for outside pleasures, some of which lead to venereal infection. Illustrative cases follow.

Noteworthy features of the article are its valuable statistical tables, and a series of reproductions of photographs of men who passed the physical examination for enlistment but who were mentally unsound.

Butts, Heber. Further Observations of the Insane of the Navy. U. S. naval med. bull. 6: 193–212, April 1912. Illus.

This report deals with 146 men of the Navy and Marine Corps admitted into the Government Hospital for the Insane from June 1, 1910, to December 31, 1911. It supplements Surgeon Butts' report published in 1910.

A table giving percentages of "recovery," "improvement," "died," etc., shows the usual large number of discharged as "not insane," proving that, in many cases, the patient was evidently convalescing from some temporary mental disturbances, and in other cases really not insane, but recovering from some unusual strain, dissipation, etc. Cases follow. Another table shows that insanity usually occurs under thirty years of age, and that proportion of insane under this age has increased since Surgeon Butts' former report of 1910. The proportion of foreign born insane has slightly decreased since the report of 1910. The proportion of insane privates has also decreased since that date, due probably to more careful selecting of recruits.

Tables giving naval and hospital diagnoses of mental disorders, with percentages of occurrence, follow.

Table Number 6

Hospital diagnosis	Number	Per cent	Hospital diagnosis	Number	Per cent
Dementia praecox	66	46.81	Acute confusional insanity	2	1.42
Symptomatic depression	1	.71	Undifferentiated mental depression	1	.71
Manic-depressive insanity	5	3.54	Alcoholic hallucinosis	1	.71
Dementia paralytica	15	10.64	Infection psychosis	1	.71
Cerebral syphilis	5	3.54	Post-traumatic psychopathic state	1	.71
Psychoneurosis	1	.71	Diagnoses not yet determined	5	3.54
Not insane	29	20.57	Total	141	100.00
Traumatic psychosis	1	.71			
Prison psychosis	1	.71			
Imbecile	3	2.13			
Psychogenetic depression	3	2.13			

"Many of these cases are merely those of psychopathic individuals not mentally strong enough to withstand the peculiar stresses of navy life, but well able to support themselves in other ways. These cases should be cared for in the psychopathic ward of a naval hospital until cured. It is a fine blunder to transfer an officer or enlisted man to an insane asylum who manifests only a few temporary or no symptoms at all of mental disorder after his transfer to that institution, but it is an equally fine blunder not to transfer to an insane asylum a man suffering with a chronic mental disease, often of very insidious onset, like general paresis and some cases of dementia praecox, or to punish in a naval prison, on sentence of general court-martial, a man who is mentally irresponsible, and has committed some offense while in this condition." Naval offenders should always be examined, before court-martial sentence is passed, by a medical officer trained in psychiatry for evidence of mental disorder, or constitutional mental inferiority.

"Desertion, drunkenness and fraudulent enlistment are the most common offenses of these insane men." Only two cases of malingerers were found among those studied. There is apparently a marked increase in the number of cases of general paresis.

A series of reproductions of photographs of mentally abnormal and defective types follows.

Chavigny, P. War "Reactions." Paris méd. 6: 8–13, Jan. 1, 1916

Chavigny (Paris méd., January 1, 1916), says that soldiers on active service are peculiarly liable, under the strain of the number and variety of the duties imposed upon them, to show mental breakdown by "reactions" which expose them, if their nature is not recognized, to be punished for breaches of discipline. Temporary loss of memory may make a man forget that he is a soldier and leave the trenches, with the result that he is court-martialled; the same thing may happen in cases of deaf-mutism from shock. The reactions of real insanity are shown by desertion, abandonment of post, refusal to obey, breaking of arms and destruction of equipment, burning of buildings, mutiny and acts of violence. These offenses include almost all those which under military law are visited with increased penalties in time of war. Chavigny relates several illustrative cases in which an expert examination saved men from death, and obtained for them a recognition of unfitness for military service. Chavigny insists that simulation is relatively rare, and he strongly urges the doctor, even when a case looks most suspicious, not to allow himself to be carried away by a first impression. He should carefully observe the man, not letting him, or any one about him, know that he is under suspicion. The expert must remember that a mistaken diagnosis of simulation justly exposes him to the severest criticism. But having made up his mind that the case is one of malingering, he should act without hesitation. The author relates a curious case of what he calls supersimulation. A censor of correspondence from the front intercepted a letter from a soldier to his wife, in which he told her not to worry about him when she was informed that he was in hospital, as in order to get away from the firing line, where he ran too much risk, he was shamming deaf-mutism. He instructed her how she was to answer all questions in case of inquiry, so as to give a convincing history of hereditary and personal antecedents. The man at this time had been under Chavigny's care, and was being treated for typical deaf-mutism caused by shell shock. All the classical symptoms were present—local anaesthesias peculiar to such cases, persistent cough, etc., besides loss of speech and hearing. Examination after cure of the deaf-mute condition showed a very marked state of mental inability. But more typical than this, inquiry of the man's family doctor confirmed the absolute reality of the hereditary and personal history which, in his letter to his wife, he had described as invented to suit the requirements of his case. The wife, on close examination, confessed that her husband was the victim of his imagination, as it often happened that he could not distinguish his own inventions from what he had actually seen. He was, in fact, a mythomaniac, who doubtless in order to give himself some importance had invented a disease from which he really suffered. Ravaut, as the result of a series of puncture experiments in cases of mental disturbance caused by the war, had pointed out the frequent presence either of abundant albumin or blood in the cerebro-spinal fluid in men who for lack of objective symptoms might have been put down as simulators. Chavigny thinks this may be a useful help in diagnosis, but only if the result is positive. He has seen it negative in cases as to the genuineness of which there could be no doubt. Furrowing of the nails, dating from the appearance of nervous or mental disturbance, may be important in cases of late or retrospective examinations.—Ontario Hospitals for the Insane. Bulletin 9: 7–8, July 1916.

Clarke, J. Michell. Some Neuroses of the War. Bristol medico-chirurgical journal 34: 49–72, July 1916

A neurosis, according to Gould, is an abnormal nervous action or an affection of the nerves or nerve-centres of a functional nature. Dr. Michell Clarke excludes all cases which exhibit any one or more of the definite clinical signs which are usually associated with structural change in the central nervous system. He admits, however, that present conceptions of what constitutes functional, as constrasted with organic, lesions may require modification. Several observers have noted that organic lesions of the nervous system may be produced without evidence of external injury. Usually there will be found structural changes in these cases.

It is, however, possible that minute multiple lesions, especially if widespread, may through a massed effect give rise to symptoms or signs not recognizable by present clinical methods of investigation as due to an organic lesion, but rather to those of functional disturbance or neurosis. These shade indefinably into cases with undoubted signs of structural change.

As the neuroses of war are partly due to the same causes as those occurring in civil life, and partly to other special causes, some of them will be familiar while others present unfamiliar or special features. Hysteria, for example, exhibits the ordinary manifestations, namely, monoplegias, paraplegias, and hemiplegias, with or without sensory disorders and muscular contractures, affections of the special senses, such as deafness or amaurosis, and of special nervous mechanisms such as of speech, and of anorexia or vomiting. Most of them are quickly cured by the accepted methods, and cases of recent origin are more amenable to treatment than those of long standing. Hysterical paralysis in a limb may be caused by a wound which may be superficial or deep, slight or severe. Most commonly the paralysis is distal to the injury or does not extend further centrally than the position of the wound. Anaesthesia is usually present and is of the glove or sleeve, stocking or sock distribution. The upper limit of the anaesthesia is transverse to the long axis of the limb, as a rule is sharply defined, and the boundaries of the loss of the different forms of sensation are coterminous. All forms of sensation may be lost together, but those to light, touch, and pain are more frequently affected than those to heat or cold. Sensation to either heat or cold may be preserved and the others lost, or cold felt as warm. Attention to the distribution and characters of the anaesthesia rarely leaves any doubt as to its true nature. The affected limb is often cold, bluish-red, and sometimes slightly oedematous.

The cause need not be a wound. These troubles may, as in civil practice, occur after any injury. Hysterical contractures of the limbs without paralysis are not so common. Hysterical paralysis and anaesthesia may complicate paralysis due to an organic lesion. Lapse of time aids in clearing up the diagnosis, for the functional disorder tends to pass off. Even in hysterical paralysis of long standing there may be wasting of the muscles; it is of slight degree and affects the muscles of the whole limb. The electrical reactions are retained.

Aphonia may be present; there is a tendency to relapse, and it is difficult to bring about a permanent cure. There may be dumbness with or without deafness from shell-shock. In most cases the cause was the shock of a shell-explosion, with or without burial, sometimes producing loss of consciousness for varying periods, sometimes not, but in either case leaving the patient in a dull. dazed, or stuporous state, from which he emerged to find himself dumb and often deaf as well. In most cases hearing returned before speech. Recovery took place in some quite suddenly; in others gradually, with ability to pronounce a few words in a stuttering manner at first. Patients were aided by means of demonstrating to them the physiological movements of the lips and tongue in speaking. Some of them exhibited the eagerness to write what they cannot say, as seen in the classical type of this affection, but others were dull and apathetic. Similarly with those suffering from deafness without obvious lesion the patients did not make the efforts to hear that a deaf person does.

Hysterical vomiting occasionally occurred. It was cured by keeping the patients strictly on milk until vomiting had ceased for some time. Hysterical convulsions occurred in only one case. He had not suffered from epilepsy. There was a history of a slight wound, and a subsequent fall on the head from a height of six feet.

In other cases the hysterical features were accompanied by more or fewer evidences of a state of general nervous shock. These neuroses present symptoms or groups of symptoms not familiar in civil practice before the war. The causes are numerous—anxiety, overstrain, want of sleep, wounds, concussion from high explosives, noise, horrible sights, and fear. The most potent are the concussions caused by high explosives and burial in the débris produced by a bursting shell. The longer the patient was buried the greater the effect. In the majority of these cases of neurosis there is a history of mental or nervous disease in the patient's family. Occasionally the breakdown occurred only after the system had been weakened by some debilitating disease.

The chief symptoms noted are exhaustion or prostration, both bodily and mental, apathy even to the extent of an absence of the desire to recover, pronounced fatigability. There is often wasting or disturbance of nutrition, with or without anorexia. Depression, with loss of self confidence, is present in the early stages. It is often associated with fears of permanent paralysis or ill-health. Tremors of the limbs are common. Patients are extremely sensitive to noises. Cerebration is slow. Memory is defective; in the more severe cases even for remote events. Affections of the special senses are common soon after the accident, but seldom persist long. Definite nystagmus is rare; nystagmoid movements are not infrequent. Insomnia is at first the rule, and sleep is disturbed by terrifying dreams. In some of these cases there is a more defined loss of power, either hemiplegic or paraplegic. As a rule there is at first more or less general loss of power of all the muscles of limbs and trunk. In all cases electrical reactions were normal; the results in the hemiparetic cases were good. Treatment by rest, good feeding, massage, passive movements, and exercises. The leg in all cases recovered before the arm.

Incoordination is present in some cases. The deep reflexes are usually exaggerated. Sphincters unaffected.

Considering the cases as a whole, Dr. Michell Clarke concludes that the pathological changes must be widely distributed through the nervous system. "The disturbance affects the highest cortical levels, the middle levels with the subconscious mechanisms for everyday activities, the motor centres in the cord with their issue in the final common path, and the muscles themselves, and often also the afferent paths and the receptive apparatus for localization and the components of deep sensibility." There is possibly a block in the passage of nervous impulses from one neuron to another, and this may be due to an alteration in the constitution of the terminal ramifications of the axones and the dendrites. The disorder of voluntary movement may be explained by an overaction of the cerebellum, or by the want of counteraction of the cerebellum owing to the impulses from the cerebrum being in abeyance.

Cases of conscious simulation of nervous disorders have been conspicuous by their absence; the influence of fear is not so great nor so lasting as might have been anticipated. In a few cases, however, the fear of returning to the front does retard recovery; where, therefore, there is no prospect of his return to active service the patient should be so informed.—H. J. Norman. J. of mental science 63: 119–21, Jan. 1917.

Eder, M. D. Psycho-Pathology of the War Neuroses. Lancet, Lond., Aug. 12, 1916, p. 264–68

Cases are described of soldiers suffering from hemianalgesia, symbolic conversion, recurrent mutism, functional amblyopias, fear obsession, and maladaptation. It is the author's view that in most cases the neurosis has arisen as a result of the strain of quite extraordinary conditions. The army is not composed of fighting men but of men from the mill, mine, farm, counting-house and country home. Men brought up to one occupation are suddenly, with scant training, called upon to make new adaptations. In the course of their normal life they would probably be equal to any emergency, "but for some of them—among the very best—the new condition called out to them to strain themselves to the utmost, and this was just a little too much." A recital of results of treatment by psychoanalysis and hypnotism concludes the article.

Emslie, Isabel. War and Psychiatry. Edin. med. j. 14: 359–67, May, 1915

Isabel Emslie notes that the war has not made any increase in insanity as far as civilians are concerned. Among those in which insanity may be said to have been caused by the war, the great proportion of cases are those people who have had previous attacks and those who are weak-minded or very highly strung. Few normal persons seem to have been affected. Many of the admissions to the asylum show that though their psychoses were not actually caused by the war, nevertheless this was playing a large part in evolution. This factor was very noticeable in the admissions which occurred in the first month or two after the commencement of the war. It has gradually become less and less frequent, till now it is rarely seen. The mental shock of the war is apparently not so keenly felt now by the unstable mind as when the blow first fell. Of patients already suffering from psychosis when the war started, it could not be said that one had a relapse which might be traced to the war. The patients who were most affected were the paranoiacs, who, though they apparently had a normal outlook on the war, really had their own distorted views of it and had developed many and varied delusions.—Med. rec. 88: 205, July 31, 1915.

Forsyth, David. [illegible]tional Nerve Disease and the Shock of Battle. Lancet, Lon[illegible]399–1403, Dec. 25, 1915

David Forsyth presents a study of the so-called traumatic neuroses, cases of which have become unprecedentedly numerous since the outbreak of the war. The clinical picture in these cases is best described as that of "nervous exhaustion." It seems that the intensity of the shock is measured in terms not of the trauma, but of the sensitiveness of the individual, a psychopathic tendency having been noted by the writer in all cases coming under his notice. Some cases recover with rest and quiet in the course of a few months; in others the treatment must follow psychoanalytic methods. With an increasing experience the writer entertains a strong doubt as to the judiciousness of sending any case of nerve shock, with few exceptions, back to the firing line. If this source of anxiety could be removed the patient's chance of making a speedy recovery would be increased.—Med. rec. 89: 166, Jan. 22, 1916.

Gerver, A. V. War Psychoses. Russkiy Vrach 14: 841–64, No. 36

The writer divides the war psychoses into three classes: To the first belong psychoses arising in persons without any hereditary taint, being caused solely by the war environment and violent emotions resulting from battles. To the second class belong psychoses that would develop in ordinary circumstances of peace, but which were prematurely brought on by the war. Here belong dementia praecox, manic-depressive insanity, paranoia, paralytic dementia, etc. To a third class belong traumatic psychoses, caused by wounds and contusions. The psychoses of the first category do not differ in any way from the old types, but they may be subdivided with those caused by battles, by trench life, and the rear guard psychoses. Clinically they belong to the acute mental disorders, amentia and asthenic psychoses. Frequently they develop in the form of neurasthenic insanities. The specific character of war psychoses of all the three classes consists in the peculiar coloring and the character of the hallucinations, illusions, delusions and the patient's conduct. The contents of the hallucinations and delusions are the experiences of the war life. Another feature is depression, followed often by excitement, and confusion of consciousness. The character of the battle (artillery, infantry, bayonet attacks, etc.), the duration of the war life at the front, the course of military events (offensive or defensive, victories or defeats), and the general morale of the army determine the larger or smaller proportion of psychoses that develop. Gerver further claims that in the present campaign the amount of psychoses is comparatively small, about one per 1,000. The main cause of the decreased rate is the total absence of alcoholism. In the Russo-Japanese War this was responsible for one-third of all the psychoses. In the present campaign there has not occurred a single case of alcoholic insanity.—Mil. surg. 38: 91–92, Jan. 1916.

Glueck, Bernard. The Malingerer; a Clinical Study. International clinics, v. 3, series 25, 1015, p. 200–52

There is a gradually gained conviction that malingering and actual mental disease are not only not mutually exclusive phenomena in the same individual, but that malingering itself is a form of mental reaction manifested almost exclusively by those of an inferior mental make-up, and cases of pure malingering in normal individuals are rare.

Further, malingering, as well as lying and deceit, far from being a form of conduct deliberately and consciously selected by an individual for the purpose of gaining a certain known end, is in a great majority of instances wholly determined by unconscious motives, by instinctive biologic forces over which the individual has little or no control. This makes differentiation between the genuine and malingered symptoms in a given case very difficult.

In the last analysis, malingering is a special form of lying. It appears to certain individuals as the only possible means of escape from and evasion of a stressful and difficult situation.

The transition from absolute health to distinct mental disease is never delineated by distinct landmarks but shows any number of intermediary gradations. To state definitely where normality leaves off and [illegible] begins would be impossible. However, legally, no intermediary stages between mental health and mental disease are permitted—an individual must be sane or insane.

In malingering we see the application of deceit and lying to a definite situation. The malingerer aside from being a malingerer is worthless mentally, and this mode of reaction is at times resorted to by individuals who had always been looked upon as being far from incompetent, which proves that under special stress, especially mental stress, men readily sink to a lower cultural level and resort to the defensive means common to this level.

Clinically, malingering is to be considered from three distinct viewpoints:

1. Malingering in the frankly insane;
2. Malingering in those apparently normal mentally; and
3. Malingering in that group of borderline cases which should rightly be looked upon as potentially insane and as constantly converging upon an actual psychosis.

It may be difficult for the lay mind to appreciate that an individual may be suffering from an actual psychosis and at the same time malinger mental symptoms. The frankly insane at times manifest conduct which, taken by itself, differs in no way from normal conduct, and the so-called normal individual at times exhibits a type of reaction which is essentially of a psychotic nature.

The conclusions which may safely be drawn from the study of malingering as it is manifested in criminal departments of insane hospitals are as follows:

1. The detection of malingering in a given case by no means excludes the presence of a mental disease. The two phenomena are not only not mutually exclusive, but are frequently concomitant manifestations in the same individual.

2. Malingering is a form of mental reaction manifested for the purpose of evading a particularly stressful situation in life, and is resorted to chiefly, if not exclusively, by the mentally abnormal, such as psychopaths, hysterics, and the frankly insane.

3. Malingering and allied traits, viz., lying and deceit, are not always consciously motivated modes of behavior, but are not infrequently determined by

motives operative in the subconscious mental life, and accordingly affect to a marked extent the individual's responsibilities for such behavior.

4. The differentiation of the malingered symptoms from the genuine ones is, as a rule, extremely difficult, but great caution is to be exercised in pronouncing a given individual a malinger.—R. Sheehan.

Grasset, J. Clinical Lecture on the Psychoneuroses of War. Med. press and circular, Lond., June 9, p. 560–63; June 16, p. 586–87, 1915

In common with Dr. W. A. Turner, writing separately in the *British Medical Journal*, under date of May 15, 1915, on "Cases of nervous and mental shock observed in the base hospitals in France," Dr. Grasset describes deaf-mutism (occasionally, but less frequently, blind deaf-mutism) as one of the clinical surprises of the great war. These cases are caused by the explosion of big shells in close proximity to the patient. The shock is both physical and mental. "A typical instance is the bursting of a shell at close quarters by which a soldier is hurled several yards through the air and more or less completely buried beneath earth or the bodies of his comrades. He loses consciousness, and on recovery, especially if he be in an emotional or overtaxed condition, finds that he can neither see, hear, nor speak. . . . He is unable either to convey or receive impressions."

Dr. Grasset suggests, as an explanation of the psychology of these cases, that these patients probably think that they have died, as the only thing which unites such a patient to existence is the preservation of his sensibility and sense of movement. The remarkable example is cited of an ingenious nurse who placed a pencil in the hand of one of these blind deaf-mutes, and guided it while she wrote a question on a piece of paper. The patient replied to the question, writing the answer in a firm round hand. "In these cases sight usually returns first, hearing next, and speech last of all. Both sight and hearing may suddenly return."

Among the less interesting psychoneuroses produced by shell shock are traumatic neuroses, the most important clinical manifestation of which is hemiplegia, or, rather, anesthetic hemi-impotence; hysteria, neurasthenia, disturbances of sleep, and changes in character, as well as various psychoses. The opinion is expressed that personal and hereditary antecedents (ante bellum) have comparatively little value in the psychoneuroses of war, but that in the etiology of the psychoses the personal and hereditary elements play infinitely the more important role.

Out of 193 cases of traumatic lesions of the nervous system examined by Dr. Grasset during the first three months of his service, fifty-nine cases of psychoneuroses were found.

It is stated that the marked psychoneuroses are not as a rule provoked by the graver injuries. "The origin is more dramatic. The explosion of a bursting shell which hurls the victim three or four yards through the air and frequently buries him beneath corpses and débris; the explosion of a shell in the trenches in his immediate vicinity by which the comrades at his side are killed, men who are perhaps breakfasting with him; an explosion which kills a comrade and perhaps hurls the lifeless body at him; the impact of a projectile which bruises and stuns without actually wounding him; these are the originating causes of the psychoneuroses of war. . . . When the victim recovers consciousness, which he does sooner or later, he finds that he is paralyzed. He thinks that he has lost one of his limbs. He is blind, deaf, and dumb, or he is in a shattered and anxious mental condition." . . . The number of patients suffering from mental desease is bound to be greatly increased as the war continues. War conditions "try men's souls" probably more than any other human experience. Psychoses and psychoneuroses are certain to claim a tremendous toll as one of the aftermaths of war.—H. Butts, U. S. naval med. bull. 10:127–28, Jan. 1916.

Hurst, Arthur F. Functional Nervous Disorders. In his Medical Diseases of the War. 1916. p. 1-40. References

"Functional nervous disorders have been relatively more common in this than in any previous war, mainly owing to the use of enormous numbers of high explosive shells. The symptoms produced do not differ from those seen in civil life, but they have been common instead of rare. It is difficult to classify them satisfactorily. They might, for example, be separated under the heads of neurasthenia, psychasthenia and hysteria, but these conditions are often present together, and many cases occur which cannot be correctly included under any of these heads. They might also be classified according to their etiology; the largest proportion of functional nervous disorders are due to the effects—apart from actual wounds—produced by high explosive shells whilst others result from the long continued physical and mental strain caused by active service. . . . No scientific classification will therefore be attempted, but the various functional nervous disorders, which have been observed during the war, will be successively described. . . ."

The writer then takes up the etiology of neurasthenia. He states as the primary causes physical fatigue and mental strain. On account of the latter factor, officers have suffered more than men because of greater responsibility. There may also be a toxic factor, originating in illness, great heat, and in some cases in anti-typhoid inoculation. An important group of cases are those in which a physical injury is the exciting cause.

Shell-shock may be defined as the symptoms produced by exposure to the forces generated by the explosion of powerful shells without any visible injury. In many cases physical concussion has also occurred. Symptoms occur most readily in those with a neuropathic inheritance, in those who are abnormally emotional or who have previously suffered from a "nervous breakdown." The author then describes the pathology of shell-shock. Carbon-monoxide poisoning enters largely into the symptoms of shell-shock. These are very varied, and the author explains why one man becomes deaf, another blind, another dumb and another hemiplegic. As a result of shell-shock, all the functions of the body are temporarily in abeyance for a period varying in different cases. These functions gradually return, some more rapidly than others. The patient suddenly realizes with his slowly awakening mind that one of these functions is lacking, worries over it, and by auto-suggestion perpetuates what would otherwise be a temporary incapacity. Several case histories of this kind of hysterical paralysis are cited.

The writer then discusses and cites cases of stupor, amnesia, double personality, headache, mental irritability, fatigue, insomnia, nightmares, hallucinations, obsessions, functional asthenopia, hysterical blindness, hysterical deafness, hyperacusis, hysterical dumbness, stammering, aphonia, hystero-epilepsy, tremor, paralysis and contractures, pain existing after the cause has been removed, malingering, and organic nervous diseases.

In the way of treatment complete physical and mental rest are essential for both neurasthenia and shell shock. The use of suggestion, hypnotism and drugs as therapeutic measures is discussed.

The chapter is followed by a list of selected references.

Jörger, Johann. Mobilization as a Traumatic Cause in Producing Dementia Praecox. Corr.-Bl. für Schweiz. Aerzte 44: 1553-70, Dec. 12, 1914

Dr. Jörger's paper is based on experience at the Zurich Asylum. As Switzerland is not at war, the effects of simple warlike preparations can be studied apart from those produced by war itself. In his paper he relates the particulars of thirteen soldiers who were called up on mobilization, and who soon after developed insanity, of the dementia praecox type. In analyzing these cases he finds they fall into three groups. In the first the symptoms of dementia praecox had been present in a mild form for some time previously. The stress of mobilization merely added fuel to a fire already burning. In the second group there was a history of previous attack which had been recovered from. In the third group the patients had previously been perfectly well. This forms the largest of the groups. Some of these recovered quickly, especially those in which alcohol was a complicating factor, but others improved very slowly, and seemed likely to be incurable. In addition to these he relates the cases of four women who became insane as a result of excitement produced by war. It is noteworthy that in all of them, as well as in some of the men, there was a great dread that they would be shot or experience a sudden and violent death. He does not state whether any other form of mental disease besides dementia praecox has been met with by him as a result of mobilization. He likewise makes no suggestion as to why this form so frequently results from that cause, except in the first group mentioned above. It is probable that, like many others, he considers dementia praecox to include nearly all cases of insanity occurring between puberty and senility.—Edin. med. j. new series 14: 399–400, May 1915.

Journal of Amer. med. assoc. 63: 1396–97, Oct. 17, 1914. Army and Mental Disease (Editorial)

The mental anguish, depicted by the numerous tales of suicide, madness and desertion among soldiers, to say nothing of mental frenzy expressing itself in wanton murder, that have come to us from our ill-fated friends across the sea, leads us to realize that there have been made as yet no scientific studies of the effect of war on the minds of officers and enlisted men in the army. Fortunately for our nation, there has been no opportunity to study the effect, on a large body of men, of short rations, loss of sleep, great emotionalism, exhausting exposure, excessive physical exertion, homesickness, etc., yet these in combination produce a strain that might well prove fatal to the equilibrium of many a mind that in regular routine would show no weakness. To be mentally sound in such conditions is of more importance than to pass the eyesight test, or to be typhoid proof.

In the light of modern psychiatry it is rumored that more than one great battle has been lost by a general who was in the early stage of paresis and doubtless dozens of men who have met the fate of deserters had their doom written in their brains, could their officers have read the signs of dementia praecox. Although the mental effects of war strain have not been studied, our war department has been carrying on, under the surgeon-general's advice, a very interesting inquiry concerning the mental status of the army. The studies show that the mentally diseased, and those who are congenitally or otherwise mentally defective, form an important problem in armies and navies.

Of all the discharges for disease or external causes, practically speaking one-fifth are on account of mental disease in some form. That is to say out of 1,062 men discharged in 1912 on account of disability from all causes, more than 200 were found to be mentally diseased or defective during the year: and these did not include the retirements for neurasthenia or hysteria, which, although the patients are not insane in the accepted sense, are in reality mental diseases that will seriously affect one's efficiency in time of strain.

Of all the mental diseases, it was found that dementia praecox was by far the most frequent form; it averaged about fifty-six per cent each year of all the dismissals. In addition to these, there is no knowing how many cases there might have been among the soldiers who deserted through the year, or were dishonorably discharged on account of "previous convictions by summary court," or who attempted suicide. Many of them, without doubt, had mild or unrecognized cases of dementia praecox.

The report gives a clear, concise outline of the modern conception of dementia praecox, explaining the way in which it may appear in the army in young men who have never shown any of the symptoms of irresponsibility when sheltered by their parents or friends, but who cannot "get along" when they are required to speak, act, and even think in prescribed and orderly fashion.

The symptoms, with the vivid case descriptions that follow, will afford the regular army surgeon much insight into cases that would seem to be merely undisciplined. In fact, the text of this bulletin will be of tremendous social value to every officer, as well as to any one dealing with large bodies of men whether in reform schools, prisons, factories or mines.

In the same clear, concise manner paranoid mental states are treated, also manic depressive psychoses, general paresis, syphilis of the nervous system, arteriosclerotic mental disturbance, hysterical psychosis and the constitutional psychopathic states.

It is interesting to note that the military prisons frequently turn over men who have been convicted for desertion, assault, murder, theft, who were probably at the time suffering from mental diseases that were not recognized until they became so pronounced that the prisoners had to be sent to the Government Hospital for the Insane.

Even despite the advice of experienced alienists, men are condemned to death by jurors, instructed by lawyers who fail to grasp the significance of these peculiar disturbances in the emotional sphere—delusions, hallucinations and sexual perversities. The pages of this bulletin would be excellent reading for the occupants of the jurors' box in a criminal law court; for what holds true of enlisted men matches up in a pretty fair average to men in general.

Journal of Amer. med. assoc. 66: 440–41, Feb. 5, 1916. Hypnotism in War Hysteria (Berlin Letter, Dec. 14, 1915)

Professor Nonne recently delivered an interesting lecture before the Hamburg Medical Society on the value of hypnotism in the treatment of so-called war hysteria, a condition which, in his experience, is extremely common among the participants as well as among the injured. Under this head Nonne places the motor and sensory nerve disturbances that are so frequently combined with vasomotor symptoms, with or without mental disturbance. Cases of tic, stubborn tremor and severe and stubborn vasomotor disturbances Nonne regards as being functional and not organic or suborganic. The truth of this belief is confirmed by the good results obtained from hypnotic suggestion in the treatment of these conditions. The causation of this hysteria may therefore be mechanical or pathologic or idiopathic, although the etiologic factors are frequently combined. Nonne does not believe it justifiable to place in a separate classification cases of cramp neuroses, akinesia, dyskinesia amnestica, vasomotor syndrome, and fear and fright neuroses, and he warns against the use of a terminology which apparently indicates an unfavorable prognosis (traumatic neuroses). The war has shown that the conception that hysteria is merely a form of degeneration, as well as the freudian theory, are based on wrong premises. Nonne has based his statements on experiences gained in his capacity of consultant in the reserve hospitals of Schleswig-Holstein and various hospitals of Hamburg. Among 1,800 cases of war injuries there were twenty-six cases of pure neuroses agreeing with the statistics of Biss, Horn and others as to the frequency of traumatic neuroses. Nonne cites cases of hysterical paralyses which were diagnosed as (1) plexus paralysis; (2) cerebral paralysis; (3) spinal paralysis; (4) organic cerebral lesions; (5) ischemic paralysis; (6) arthritis deformans, and (7) inflammation of serous membranes. These wrong diagnoses were in many cases accepted in the various hospitals of which patients were inmates. It is said that the reason for these wrong diagnoses was the fact that the classical Charcot hysteria is not sufficiently well known, and because these cases are not common in the general practice of a physician during times of peace. The diagnosis of classical cases is easily made because of the characteristic symptomatology. The experiences gained in the war have confirmed this statement. Restriction of the field of vision is frequently, although not always, present; sensory disturbances occur less often, and anomalies of mucous membrane reflexes occur very irregularly. The hysterical character is usually not present, but vasomotor disturbances occur with astonished frequency; likewise isolated muscle contractions. Nonne demonstrated cases of isolated contractures of muscles in the peroneal group, and isolated contractures of the elbow joint, the flexor muscles of the thumb and the interossei. In more than half of the cases the neuropathic tendency is missed even when the most careful anamnesis is made. It is impossible to differentiate on the basis of complete absence, or preceding loss, of consciousness. Experience has shown that a somatic trauma alone, aside from a psychogenic cause, may produce the hysterical syndrome. By far the most frequent traumas concerned in the etiology of this condition are, in the order named, shell contusions, wounds, fatigue and fear; finally, there are cases, by no means infrequent, in which a particular exciting cause cannot be demonstrated. We have learned that the hysterical syndrome may, under unusual conditions, occur much more easily in a so-called normal nervous system than has heretofore been believed to be the case, and it is in these cases that Nonne has found the prognosis to be very much better under hypnotic treatment. From the middle of October, 1914, to the middle of September, 1915, Nonne treated sixty-three cases of "grand hysteria." Fifty-one of these patients were cured, including twenty-eight "rapid cures" and twenty-three cases in which the cure was effected more gradually. By means of waking suggestions, Nonne succeeded in curing five patients after previous attempts had failed. In three cases a cure was effected on the day following the hypnotic suggestion (suggestion *à échéance*). In one case dyskinesia amnestica remained unaffected even under deep hypnosis. Twelve patients could not be cured; ten of these were refractory against hypnosis. Only two became fully hypnotic. A cure was effected in those cases only in which the hysterical syndrome was acute. In those cases in which the development of the condition extended over days or weeks, a cure was effected correspondingly slowly. The duration of the hysterical syndrome and a neuropathic tendency on the part of the patient did not alter the prognosis. A cure was affected, even "rapid cures," in cases of from two to thirteen months' duration. Some of these patients were refractory to the treatment because of a desire not to return to active duty. Nonne cited five cases of stubborn generalized muscle tremor that yielded promptly to hypnotic suggestion. He shows that hypnosis is entirely independent of neuropathic tendencies, general exhaustion and the consequent reduction of resistance, nor did he find any difference in producing hypnosis among people coming from different parts of Germany, from the city or country, or in various walks of life. He frequently saw cases in which the subject yielded easily to hypnotic suggestion. Nonne says that in such cases it is advisable to give the suggestion to the patient that others do not possess the same hypnotic influence over him. Nonne cited four cases of this kind. As to recurrence, Nonne admits that many of these cured patients will have recurrence if they are subjected to the influence which produced the original attack. That the ordinary garrison duty or field service does not play any part in the production of recurrence was shown by six cases cited. Nonne calls attention to the advantages of hypnotic suggestion: 1. Cures are frequent and rapid. Nonne's patients had all been treated ineffectively for many months in various hospitals. 2. Hypnosis may be regarded as a means of differentiation between "organic" and "functional" cases. Nonne cites the case of an officer who received a grazing bullet wound of the left parietal region and developed a right-sided superior monoparesis with glovelike areas of disturbance of sensation of all kinds of hands and fingers, but normal tendon and periosteum reflexes and absence of hemiparalysis. In the hypnotic state sensation was normal, and after several treatments the patient was cured. 3. Cases of stubborn tremors and tics of long duration as well as severe vasomotor disturbances were promptly healed by suggestion, showing that these symptoms must have been purely functional. 4. Hypnosis would be of great value in determining the disability of the individual, the degree as well as the duration, so that he can be returned to duty if he is fit for duty. Nonne recognizes that difficulties lie in the way of the adoption of this procedure, particularly as time and patience are required, and the hypnotizer becomes fatigued rapidly and much more severely than does the hydrotherapist or the electrotherapist; nor can he rely on assistants.

Journal of Amer. med. assoc. 68: 1274, April 28, 1917. Lunacy and the War; Decrease in the Number of the Insane (London Letter)

The official report for the year 1915 states that, January 1, 1916, the number of notified insane persons under care in England and Wales was 137,188, being less than that recorded, January 1, 1915, by 3,278. This decrease may be contrasted with an increase of 2,411 recorded for the year 1914, and an average annual increase for the ten years ended December 31, 1914, amounting to 2,251. Thus if that average rate had been maintained during 1915, the number under care, January 1, 1916, would have been 142,717, or 5,529 above the actual record. It is noteworthy that this is the first occasion since reliable statistics have been available (since 1859) on which there has been a decrease in the numbers under care as compared with those of the preceding year. Except in 1885, 1886 and 1890, when such increase amounted to 452, 735 and 728, respectively, the numbers have been nearer 2,000 than 1,000, and since 1893 above the former figure, in all but four years, a maximum yearly increase of 3,235 being recorded in 1904. It is natural, therefore, to infer that the diminution bears some relation to exceptional conditions—social and economic—arising from the war. The admissions during the year were 21,173, or 2,055 below the number recorded in 1914, and of these, 17,710 were first admissions being 547 below the decennial mean. The report suggests that as the decrease coincides with altered conditions arising from the war, an explanation might perhaps be found in a diminution of insanity owing (1) to the withdrawal from civil occupations of a large proportion of the male population; (2) in the great call for employment by both sexes alike, and (3) the increase in material prosperity afforded thereby. On the other hand, it is remarked that the direct and indirect effects of war in disturbing mental balance in those actively engaged in it, and the stress of anxiety and sorrow experienced by those at home are not to be ignored. These and certain other considerations, however, are regarded at this juncture as too speculative to be given much weight.

Journal of Amer. med. assoc. 64: 678–79, Feb. 20, 1915. Nervous and Mental Disease (Berlin Letter, Jan. 19, 1915)

The Berlin psychiatrist, Albert Moll, recently reported on the results of a tour for psychiatric study through the western theater of war, the hospitals of Northern France and Belgium. Altogether relatively few insane were found, while nervous disturbances appeared somewhat more frequently. Cases of imbecility were only rarely observed. The reason for this is, first, the better education in psychiatry of military surgeons, who immediately reject such patients, and second, the fact that the registers of the subsidiary schools for feebleminded and those of the insane asylums have been made accessible to the recruiting boards. A few cases of primary alcoholic insanity have been received in the special wards of the hospitals. Moll saw during his trip only two drunken soldiers. He holds the provision that complete abstinence be not required during the campaign to be fully justified, but regards it as desirable that presents of alcohol to the soldiers should be distributed by their superiors. In view of the sanitary conditions in France and Belgium and of the composition of the water that is available, the addition of wine to the water is required. In Liege, where a nervous department has been established in the hospital, only nineteen patients had been admitted up to the middle of November. Among these were three epileptics, three cases of anxiety neurosis and six of alcohol psychosis. This is a small number considering the large number of soldiers who are stationed in that neighborhood or pass through it. In Brussels, 120 patients were treated in the department, of whom, however, a great number were affected with organic nervous diseases, such as shot wounds of the nerves or cases of apoplexy, and also five cases of primary alcoholic insanity, thirteen of paralysis, seventeen of epilepsy and seventeen of hysteria. In a large army hospital in the neighborhood of Argonne that received a very large number of soldiers, only ten or twelve cases of insanity were observed by a psychiatrist who had seen all the patients. Cases of exhaustion psychosis have been observed, as they were in the Russo-Japanese War. Moll, however, would include these with hysteria rather than genuine insanity. Diagnosis is difficult in the field where any sort of history is lacking, and also it is difficult to decide where the treatment of cases of insanity can best be carried on. Transportation home is best secured in separate departments of the hospital train which are provided with specially trained nurses.

Journal of Amer. med. assoc. 65: 2102, Dec. 11, 1915. Nervous Affections Caused by Bursting of Shells (Paris Letter, Nov. 18, 1915)

At a recent session of the Réunion médico-chirurgicale de la X-e armée, Drs. Gustave Russy and J. Boisseau read an interesting paper on this subject, based on sixty-seven cases of nervous affections provoked by bombardment. The conditions in which these disturbances occur are always the same; bursting of a shell of large caliber near by, killing or wounding neighboring comrades, more or less prolonged loss of consciousness, followed by an outbreak of nervous disturbances. The latter may be grouped in three classes:

1. Disturbances of hearing and speech (deafness, loss of speech, deafmutism, stammering). The patients sometimes present an expression of terror and mental confusion, sometimes an impassive and stupefied countenance, sometimes an expressive mimicry, gesticulating, pointing to their ears, demanding to write.
2. Various nervous complications, such as trembling, convulsive crises, astasia, paraplegia, etc.
3. Mental disturbances such as confusion with stupor and delirious ideas.

Somatic signs sometimes observed are a very slight and temporary elevation of temperature with often persistent headache. In eleven out of sixteen cases of deafness, examination revealed the presence of small lesions, generally old, sometimes recent. In seventeen out of nineteen cases examination of the cerebrospinal fluid gave negative results (generally the fluid trickled drop by drop; there was no hyperalbuminosis or lymphocytosis); in two cases there were positive results (slight hyperalbuminosis in one, slight lymphocytosis in the other). The two patients presented mental confusion and the second had albuminuria.

Cure always followed the treatment, immediately (that is, within a day) or tardily (within two or three days in the intense forms).

The complications presented in the sixty-seven cases could all be classified as functional or hysterotraumatic. There are no signs which give reason to suspect a disturbance of the central nervous system, no reflex trouble, no chemical or cytologic modification of the cerebrospinal fluid. All the symptoms disappeared very rapidly under suggestion. The ease and rapidity of cure of these patients treated at a date very near the onset of the condition contrasts singularly with the slowness and even the failures observed in the zone of the interior. There would appear to be considerable practical value in early treatment from the military point of view.

Journal of Amer. med. assoc. 66: 1635, May 20, 1916. Nervous Disorders (London Letter, May 1, 1916)

Nervous disorders due to the shock and strain of bombardment are conditions which cannot be affected by hygienic precautions. With the modern development of big guns and high explosives, shell-shock has become frequent. A committee has been appointed to investigate the subject in co-operation with the leading French neurologists. The cases have shown great divergence from the disorders observed in civil life. When exposed to concussion of a high explosive, a variety of symptoms may be produced. All consciousness of the explosion may be obliterated, or the soldier may simply become dazed, and afterward his conduct may be "curious" and his actions indeterminate. For these conditions the only treatment is rest. After a heavy bombardment a healthy man may break down, and if removed to a place of safety, collapse and fall asleep in spite of the noise that is going on. Some men then recover, but others cannot support noise for a long time. They show overreaction to noise. A cab whistle or an exploding tire outside a convalescent home will bring some patients from their beds. In another group a condition of nervous irritability rather than exhaustion is produced. Thus continuous shelling, even though it produces few casualties, has a wearing down effect. In men with a stable ner-

vous system the effect is temporary, but it is not so in those with neurotic tendencies. Hence our neurologists who are familiar with the nervous systems of our men and our enemies predict that the imperturbable British temperament will confer an advantage in the coming struggle.

Journal of Amer. med. assoc. 65: 2180–81, Dec. 18, 1915. Nervous Symptoms in Wounded Patients (Paris Letter, Nov. 25, 1915)

The Société de neurologie de Paris recently held two extraordinary sessions. under the presidency of Prof. Gilbert Ballet, to study the methods of clinical examination and the course to be pursued in cases in which exaggeration or simulation of certain nervous symptoms is suspected in wounded patients. The medical service had convoked the heads of all the military neurologic centers to take part in these sessions. Such a meeting had been much desired by French neurologists who for a year had to treat wounded patients with nervous symptoms. The opportunity to exchange scientific and practical opinions on the subject created much interest. At the end of the session, the society passed the following resolutions, which were transmitted to the medical service:

1. In each of the armies, neurologic and psychiatric centers, such as already exist in several of them, should be formed. In such centers all patients affected with nervous and mental conditions and all those suspected of simulation or exaggeration should be examined. The purpose should be, on the one hand, to recognize, before they are removed to the special centers of the interior, the patients affected with lasting organic lesions, and on the other hand to avoid the removal to the rear of patients suspected of simulation and exaggeration or affected with nonorganic conditions, which can be recognized, treated and cured very rapidly in the zones of the armies, as appears from results already obtained in existing centers (The Journal, Dec. 11, 1915, p. 2102).
2. Soldiers suspected of simulation or exaggeration or of voluntarily prolonging their nervous troubles should be sent to special services where they can be under competent medical oversight and severe military discipline at the same time. Experience has shown the value of such measures in certain neurologic centers where they have been applied. It would be desirable that such special services be attached to the military neurologic centers already existing, if the heads of these centers are able to operate them.
3. The opinions of the physicians of the neurologic centers with regard to a soldier dismissed by them should be taken into account wherever the soldier may go.
4. Under no circumstances, at present, should soldiers affected with psychoneuroses be sent for discharge to the committees that arrange discharges.
5. In view of the great number of diagnostic errors in cases of wounded men with nervous symptoms, it would be desirable that in each region, or group of regions, neurologic experts should regularly visit all hospitals and other places where patients are under treatment. These experts should make notes on each neurologic case for the information of the committees that arrange discharges and to enable the attending physicians to form an opinion of the propriety of sending the soldiers back to service or to one of the neurologic centers.
6. In view of the delicate scientific and practical problems which daily present themselves with regard to soldiers in neurologic hospitals, it would be desirable that the heads of the neurologic centers should have the opportunity to meet from time to time in order to co-ordinate their efforts to render the course of action uniform.

M. Justin Godart, under-secretary of the military medical service, informed the Société de neurologie de Paris that he was forwarding to the director-general of the medical service of the armies, with his approval, the resolutions passed by the society. Experience has shown, he said, the justification for forming neurologic psychiatric centers in each of the armies. So far as the second resolution is concerned, it would be simple to form, instead of special services, departments annexed to the neurologic centers operating under competent medical direction and with a more severe discipline. Resolutions 3, 4 and 5 have his unqualified approval. As for Resolution 6, M. Godart is ready to approve the meetings requested provided they are not too frequent.

Journal of Amer. med. assoc. 64: 1340–41, April 17, 1915. Nervous Troubles Among the Wounded (Paris Letter, Mar. 25, 1915)

The Société de neurologie de Paris has sent the minister of war a letter calling attention to the fact that men affected with nervous troubles are ordinarily sent to the special neurologic services too late. To take examples from among the most common wounds of war, in cases of lesions of the nerves by balls or fragments of shell, which are very numerous, it is essential that the possibility of operation and its character should be determined as soon as possible. This is a point which cannot be decided without a very minute neurologic examination, requiring not only particular training but also the use of instruments with which most ambulances are not provided. Among the greater number of patients affected with traumatic neuritis and sent to the neurologic services long after the onset of the symptoms, fibrotendinous retractions and subankyloses have developed and persisted in spite of treatment and in some cases have been incurable. Especially to be deprecated is the prolonged sojourn in unsuitable environments of patients affected with hysteric troubles—hystero-traumatism, traumatic neuroses and troubles due to suggestion. Then there are also the simulators who can be best distinguished by a neurologist. Observation shows that hysteric disorders disappear very rapidly when they are properly diagnosed and treated by psychotherapy and countersuggestion at their inception. They may, on the other hand, be very refractory to treatment when, having been wrongly diagnosed at first they have been fostered by the sympathy of companions, etc. There is no exaggeration in saying that there are now in the ambulances and military hospitals thousands of men of this class who, if properly treated, should have been able to return to their posts of duty long since.

Therefore the Société de neurologie de Paris believes that all patients who are or appear to be affected with nervous troubles, organic or non-organic, ought to be sent, as soon as possible, to the neurologic services. Moreover, for those patients whose abnormal condition persists in spite of treatment and in whom exaggeration or simulation may be suspected, special services for medical oversight and discipline should be organized.

Journal of Amer. med. assoc. 66: 1398, April 29, 1916. Psychic Disturbances Incident to the War (Berlin Letter, March 28, 1916)

Shortly after the beginning of the war a neutral European periodical, the *Telegraph*, of Holland, published a statement, credited to a French psychiatrist, that since the beginning of the war 750,000 German soldiers and 1,600,000 civilians had become insane. Professor Bonhoeffer, the Berlin psychiatrist, made an investigation of this subject. He found that the war cannot be held responsible for any particular psychic disturbance. In fact, the same types of mental diseases are prevailing now as in times of peace, nor is there any change in the syndrome of any psychic disorder. The usual type of psychic disturbances, that is, dementia praecox and the manic depressive insanities, are encountered in their usual form. Of course, there is bound to be some difference in the clinical history of these diseases because of the fact that these patients live in a different environment; but this cannot be held responsible for the creation of a different type of disease. Nor do these disturbances occur more frequently now than during times of peace. These facts throw an entirely new light on the etiology of mental diseases, because if exhaustion, lack of sleep and emotional disturbances really play the role in the production of these diseases that has been credited to them, then they ought to occur more frequently at the front during war time than at home during times of peace. Still this is not the case. In fact, we are informed by the psychiatrists at the front that, while the exhausting marches, the comparatively poor housing and the constant exposure to the shock of exploding shells are productive of nervous disturbances, a real psychosis has not been developed. Neither is it believed that life at the front will predispose to the development of psychic disturbances later on.

THE PSYCHOPATH

Of course, the so-called psychopath, the subnormal individual, probably is an exception in that he is more exposed to conditions which may early break down the sensitive borderline between the normal and the subnormal. These persons, however, also form a distinctive group in ordinary civil life and break down quickly under unusual mental strains. Therefore, the war can hardly be held responsible for the production of a condition which already exists. It has been shown that the majority of the psychic nervous disturbances encountered since the beginning of the war have occurred among these individuals. The clinical manifestation is usually a variation in temperament, paralyses, spastic conditions, peculiar forms of delirium and loss of memory sense. In fact, the picture is recognized as being of the hysterical type, and every form of hysteria is seen just as it occurs in times of peace. Hence, one cannot speak with propriety of war psychoses. The war merely causes these cases to occur earlier and more frequently, although under ordinary conditions some of these persons might have escaped the psychic breakdown. It has been the aim of the military authorities not to permit the psychopath to enlist for service, but naturally many difficulties are met in attempting to determine who is and who is not a psychopath because of the very slight differentiation that may exist between the normal and the subnormal. In the case of many psychopaths the condition is not recognized until the man has seen service, and furthermore, many psychopaths render good service without any or only slight psychic disturbances. Military service has helped some psychopaths to overcome the deficiency. Their disturbed, easily excited mentality has prompted them to enlist for service as volunteers; the strain of such service has helped them to forget their mental shortcomings, and they have been molded into good soldiers. Certain types of psychopaths, the adventurer, the youthful transgressor, the boy who has fought school discipline, the young man who has come into conflict with the police, who has fought law and order, often finds himself entirely at home and at peace with the law and himself when he sees service at the front. Many incorrigibles who have been enlisted from institutions have made splendid soldiers. Thus it will be seen that the psychopaths cannot be and should not be prohibited from entering on military service. Often the most careful selection is bound to be followed by a certain number of cases of psychic and nervous disturbances in psychopaths. Just how great this number will be cannot be stated at this time. The individual experiences of the psychiatrists at the front lead one to believe that the number is not very great. They report that their services have not been called for to treat psychic disturbances, and there has been no demand for the establishment of special so-called psychic stations at the front as was the case in the Russo-Japanese War.

Kay, A. G. Insanity in the Army During Peace and War and Its Treatment. J. of Royal army med. corps 18: 146–58, Feb. 1912

The author says that until recently nervous and mental diseases in the army have received very little recognition in England, but the apparent increase of these conditions makes the subject deserving of special study. In France and Germany statistics show that there has been a continuous increase in mental diseases in the army for the last ten years, the incidence at present being alarming. In England, also, statistics show an increase, though not quite to the same extent. Part of this increase is apparent and appears to be due to better methods of recognizing cases on the border line.

In the French Army among the infantry the disturbances most frequently observed are psychoses synchronizing with attacks of mental exhaustion. The sudden change from comparative comfort to an existence imbued with all the rigors of military discipline, not to mention the exactions incident to enforced mental and physical exertion, entails something more than the ordinary soldier possesses, namely, the sort of adaptability associated only with men who are habitually in possession of normal intellectuality. One can readily see that since the individuality of the ordinary soldier is none too strong, he will not be long in manifesting insanity, should there be a predisposition to cerebral disturbance—a deplorable condition that is brought on partly by the officers in charge of regiments who seem to see in his lack of ability to submit to stringent military rules only what is perverse in human nature that must be corrected by increased discipline. This stubbornness is held responsible for insubordination, and disregard of military rules, for open rebellion, when mental disease should be regarded as the prime cause.

The Army Medical Report of the British army for 1908 gives the following figures: Total number of recruits inspected, 61,278. Rejected for weakness of intellect: (1) On inspection 54, equal to 0.88 per 1,000 inspected; (2) Three months after enlistment, 71, equal to 1.16 per 1,000 inspected.

The forms of insanity most prevalent in the British army are melancholia, mania, and the delusional types; very few cases of general paralysis of the insane occur, although there is always a large amount of syphilis and its sequelae. The short-service system would partially explain the comparative infrequency of this particular form, but the author also thinks the more effectual methods of treating syphilis would account for the absence of general paralysis of the insane perhaps better than any other reason.

British medical officers examining recruits are bound by regulations to test the mental capacity of every recruit before enlistment. This is done by directing attention particularly to mental alertness, and to signs of degeneracy, epilepsy, and all forms of nervous instability, or any other condition likely to produce mental weakness. In this way, so far as medical skill can prognosticate, the psychically weak are eliminated.

Insanity is invariably increased as the result of war. The prevailing types of the disease are the depressive and delusional forms.

Regarding the effect of a campaign on mental diseases, the experiences of the Russo-Japanese War have furnished valuable information. It is worthy of note that this was the first time in which mental diseases were separately cared for by specialists from the firing line back to the home country. The experiences of the Japanese side have not yet been published. The Russian experiences have, however, been fully reported.

Steida (*Centralblatt fur Nervenheil und Psychologie*, 1906) says that battle as a psychic trauma is not alone sufficient to cause a psychosis. The most immediate results of battles are hysterial excitement and confused states. These usually clear up within a few days, but irritability, fearfulness and emotional instability remain for weeks. He lays as much weight upon the prolonged exertion, the deprivations, the loss of sleep, hunger and thirst as upon the psychic trauma of battle. Among the Russian officers there was a high percentage of alcoholic psychosis, and also neurasthenic and hysterical conditions. Wagner (*Militarärztliche Zeitschrift*, 1908) describes many cases of hysterial fright with great excitement and confusion, ending finally in a semi-conscious state with great mental and bodily weakness. The lack of complete examination of officers and men before going to the front greatly increased the number of mental cases. Prof. Autokratow personally saw officers in the early stages of paresis and with arteriosclerosis going to the front, only to be returned in a few months with more active manifestations of their ailments.—Mil. surg. 30: 457–59, April 1912.

King, Edgar. Mental Disease and Defect in U. S. Troops. Bull. no. 5, Surg. Gen. Office, War Dept.

This is a rather comprehensive work and is the result of the experience of the writer during over two years' detail at the Government Hospital for the Insane. It includes not only a valuable consideration of psychiatric literature, but also pertinent conclusions which will surely prove of value. The reader will be impressed with the pervading dogmatic tone. However, this is permissible and perhaps desirable, as the bulletin is intended for medical officers, and particu-

[illegible] those on recruiting duty most of whom have no special interest or knowledge of the subject. These will find it of great utility and practically all meat.

In the introduction attention is called to the importance of the problem of mental diseases from a military viewpoint. In 1912 the percentage of disability discharges for mental alienation was twenty per cent, the discharge rate per 1,000 being [illegible], which is higher than any other cause. That is, [illegible] men were found mentally incapacitated, which figures would be increased if hysteria and neurasthenia were included.

Particular emphasis is laid upon dementia praecox, because more than half of the army admissions for mental disease were of this form. No doubt many of the deserters and those discharged as undesirable were of this class.

After considering the history and nature of the disease the cause is taken up, emphasizing the fact that the age involved is that of the likely recruit and that [illegible] per cent of cases show a hereditary taint.

In the course, symptomatology, and prognosis the writer closely follows the Kraepelinian teachings. The fact is noted that the praecox process may be present and producing changes in the mental life and character and conduct of an individual months or years before the disease becomes frankly manifest. This accounts for soldiers who persist in repeated alcoholism, those who desert without apparent cause and shortly afterwards fraudulently re-enlist even though aware of the certainty of punishment, the practical failure, those unable to "get along," the persistent sexual debauchees, the inadequate and inefficient. Numerous characteristically descriptive cases are cited under the various forms of praecox, the hebephrenic, catatonic, paranoid, and mixed.

Under manic depressive psychosis it is noted that this is a comparatively rare disease in the service. This entity is traced in the fluctuations, according to different authors, from the all-inclusive idea of Kahlbaum to the more limited one held at present.

Points noted are the usually hereditary cause; that attacks often occur without apparent reason; not to regard the disease as "line of duty" without carefully searching the history for previous attacks. The excitements of praecox are frequently mistaken for this condition.

The best test of recovery is insight. All cases realize that they have been insane, thus differing from praecox. Recovered cases should not be returned to the service.

Paranoid states are a frequent occurrence in service cases. It is concluded that 5 to 8 per cent are paranoid praecox and that none recover, and that a paranoid picture may be present in other forms of psychosis.

General paresis, next to dementia praecox, is the most common mental disease in the military service. It is sharply defined clinically and is easily diagnosed by the laboratory findings. It is suggested that all cases be thoroughly examined physically and neurologically as well as mentally to avoid error.

Precautionary measures should be taken to prevent the enlisting of syphilitics. The intensive treatment of those in the service and the risk of allowing these potentially insane men on duty, particularly in war time, when the onset of paresis may cause disability, are emphasized.

In cerebral lues no one type of mental picture occurs regularly. There may be simple deterioration, paranoid states, excitements or depressions, a paretic-like condition or a neurasthenic picture, and this latter is an important condition.

The mental impairment associated with arteriosclerosis is emphasized. Alcohol is considered the important factor in producing the vessel change. There are failure of interest and loss of productivity, which are serious in an officer holding an important command. The power of comprehension is lessened; they are easily fatigued mentally, and there is irritability and depression. Not a few officers become mentally inefficient from arteriosclerosis before the age of retirement. They are practically certain to break down under any stress of service.

In the chapter upon "Exclusion of the imbecile and moron from the army" attention is called to the necessity of a correct life history and the connection between the stigmata of degeneration and deficient mental powers. Waiving of physical defects in applicants for enlistment is risky. It is better to keep close to the normal standard.

The writer suggests that it would be advisable at the recruiting depot to send all men who do not do as well as the average in their routine work to the surgeon for mental examination, so that it may be definitely determined whether it is advisable to expend further time and money upon them.

Under the heading of psychopathic make-up is considered a class of individuals who cause the service lots of trouble. They can not cope with the world except in their own peculiar way. They are useless in the regular service, as they are unable to adjust themselves to the discipline. They are persistently insubordinate, excessive in and intolerant to alcohol, and are likely to be addicted to sexual perversion. This type is liable to develop a psychosis, when they are unable to escape by desertion, conditions to which they can not adapt themselves.

It is suggested that court-martial offenders be examined mentally so as to avoid returning to duty those of abnormal mental make-up, in whom this factor was, no doubt, the cause of their offense.

It is not always true that an offender who is able to behave well during his stay at a disciplinary barracks is fit to return to the service. A great number do well under the conditions in such an institution or on probation, but soon lapse when placed on their own responsibility and subjected to alcoholic and accompanying temptations.

In considering borderline cases it is stated that if a soldier or officer reacts habitually in an abnormal manner to events in his daily life to such an extent as to make him relatively useless, perhaps obnoxious or dangerous, or not to be trusted, and at all events entirely unsuited for military service, and no frank mental condition is found, and assuming that he is proof against admonition, and that endeavors to teach him to behave in a normal manner are unsuccessful; that rebuke, reprimand, company discipline, and punishment by court-martial only temporarily or not at all improve his mode of reaction to his surroundings, it will probably be found in a careful history of his life that he has always reacted abnormally, and that the cause of his military and civil inefficiency is constitutional, and that he should be discharged on a surgeon's certificate of disability, not in line of duty.

In the concluding chapter the author sums up and emphasizes certain points, such as the difficulty of classification, the paramount importance of dementia praecox, which group included 40 per cent or more of admissions here from the military service, and the rarity of manic depressive psychoses. He prefers the use of the terms "depression" and "excitement undifferentiated" to the older terms "mania" and "melancholia," and the same applies to "psychosis undifferentiated." He states that true paranoia is very rare, but that paranoid disease pictures are not infrequent, and the most of these belong to the praecox group. Where alcohol is a causative factor he believes it desirable to report such cases as "psychosis associated with alcoholism," thus emphasizing the alcoholic factor, and if the psychotic state be due to cocain, morphin, etc., a similar form of diagnosis makes the case clear.

As this publication is easily obtainable it would well repay reading the original. —R. Sheehan, U. S. naval med. bull. 8: 685–88, Oct. 1914.

King, Edgar. The Military Delinquent. Mil. surg. 37: 574–78, Dec. 1915

"During the fiscal years 1908–1913 inclusive, the total number of enlistment contracts in force, according to figures obtained from the Adjutant General of the Army, was about 250,704. Of this number not less than 30,000 were terminated by the soldier becoming a military delinquent. This is twelve per cent of the total. A very large percentage of these men deserted the service, the number of desertions reported during the period under consideration being slightly in excess of 23,000."

Capt. King made a study of 1,000 general prisoners as to causes of their delinquency. Results are given in the following table:

Cause	Number	Percentage
Dementia praecox (1)	25	2.5
Manic depressive psychosis	1	0.1
Cerebral syphilis	4	0.4
Epilepsy (2)	16	1.6
Morons	13	1.3
Drug habit	10	1.0
Psychopathic constitution	200	20.0
Constitutionally inferior	70	7.0
Acute alcoholism	70	7.0
Habitual drunkenness (3) existing prior to enlistment	70	17.0
Chronic alcoholics (3)	40	4.0
Personal ambitions	15	1.5
Youth (usually in association with other factors)	80	8.0
Relatives	30	3.0
Women	30	3.0
Miscellaneous	226	22.6
Total	1,000	100.0

(1) In 7 cases diagnosis not absolute but entirely probable.

(2) In 7 cases diagnosis not absolute but entirely probable.

(3) In over 90 per cent, condition existed prior to enlistment.

Captain King makes the following suggestions for reducing military delinquency:

1. Increased knowledge among medical officers and officers of the line as to causes of military delinquency.
2. Increased efficiency of the recruiting system so that the unfit are eliminated at the time of enlistment.
3. Use of best efforts on the part of medical officers to reduce the tremendous amount of intemperance at present existing in the army. Most of the cases of alcoholism began their excesses prior to enlistment.

McDowell, R. W. Diseases incident to submarine duty. U. S. naval med. bull. 11:49, Jan. 1917

Nervous complaints are numerous and varied. While seasickness is rare on the battleships it is not uncommon in the submarine service. It is not considered as disgraceful on a submarine as it is on a battleship. When one considers that these 300-ton boats go to sea in all kinds of weather it is not surprising that there should occur occasionally a case of seasickness. All hatches must be battened down even when running on the surface, except in the very smoothest water, and the lack of fresh air is also a causative factor. The men who can stay on deck rarely become seasick.

Nostalgia and neurasthenia are occasionally seen in men whose nervous systems are not strong enough to withstand the hardships of the arduous duty with the submarines.

The writer has seen two cases of claustrophobia in the submarine service in the past two years. In each case the man was seized with the most uncontrollable terror of the closed space when the boat was being submerged. The mental suffering and anguish of these cases is pitiable. One case which I very carefully studied recently was that of a man who had a splendid service record, had been in the navy for over eight years, most of it on the battleships and destroyers, was an able machinist, and certainly not a physical or a moral coward. When he went out on the submarine for a drive he would begin to show signs of restlessness as soon as the boat shoved off from the dock, and as the boat began to submerge he exhibited signs of fear which he tried manfully to control. Perspiration ran from him, his pulse jumped to 150 or 160 per minute, his pupils dilated, respiration became rapid, and he became so excited and confused that not only was he not to be depended upon, but was actually a dangerous man in the boat. Once he lapsed into unconsciousness.

He was at first encouraged by mental suggestions and all hands tried to stimulate him and keep his thoughts on other things, but without result, and he would feel this terrible oppression coming over him. He could not get enough air and his "throat closed up" and his "lungs felt as if they were being squeezed in a vise." The treatment was of no avail and he was transferred from the submarine duty to a battleship, where he has been in good health. When these cases are transferred to a large ship they invariably and immediately improve.

McMullin, J. J. A. Some Observations on the Examination of Recruits: Defective Minds. U. S. naval med. bull. 9: 73–74, Jan. 1915

"During the spring of 1912, while temporarily attached to the naval prison, Portsmouth, N. H., I applied a modification of the Binet test to some of the prisoners, and was surprised to find that the majority of those examined seemed to be defective." Many of these might have been excluded from the service if appropriate tests had been applied at the recruiting station.

"Only the grossest types of insanity can be discovered during a short examination conducted by one untrained in psychiatry." Sometimes alienists find it necessary to study certain cases some months before giving an opinion. Hence tests based on the Binet method can only help to solve the problem of ridding the navy of undesirables. But an incomplete examination is better than none, and it is too much to expect any test to be unfailing in results.

The writer then describes briefly the test applied to applicants at Portsmouth.

Med. rec. 90: 374, Aug. 26, 1916. Functional Psychic Disturbances in the Light of War (Editorial)

Psychiatrical problems receive their share of enlightenment from the vast laboratory the war has thrown open to medical science. Neuropathology and psychopathology are the subjects of much attention and discussion. Thus it comes to pass that modern theories in regard to the relation of psychic trauma and psychopathic predisposition are being distinctly advanced.

The observations made by Dr. Lewellys F. Barker in his presidential address delivered before the American Neurological Association in May, 1916, printed in full in the *Journal of Nervous and Mental Disease* for July, and in abstract in the *Medical Record* of July 29, are confirmed by reports from the front, a number of which are published in abstract in the *Review of Neurology and Psychiatry* for May, 1916. There is an agreement of opinion that a distinction can assuredly be made between the psychotic or the psychoneurotic disturbances arising as the result of battle shock and that which is complicated by a psychopathic tendency, which only awaits, in order to become active, such extreme conditions and such excessive and untoward demands for adaptation as the exigencies of war present. Sudden and violent abnormalities in reaction are inevitable. Their occurrence, however, in no way denies the importance to be attached to the unconscious mental life in the production of mental disturbances. It does not argue for the current inflexible conception of pathological causes which attribute such phenomena always to the immediate traumatic agent.

It is noteworthy that these disturbances of mental equilibrium, inevitably induced and violent though they may be in character, are easily amenable to a wise therapy. The factor of chief significance in the consideration of the genetic theory of the functional neuroses and psychoses is the appearance and perhaps persistence of accompanying mental phenomena which seem to be aroused by the immediate traumatic outbreak and to follow in its train. Testimony points generally in this direction, that it is with the man who furnishes the fruitful soil, neuropathic or psychopathic, in whom these sequelae are observed. The precipitating cause applies the spark to the unconscious material. The actual emotional importance of the immediate trauma manifests itself in the terrifying nature of the dreams of actual war experience. These, however, are transient phenomena. There are blended with these dreams, Dr. Bruce reports, quoting from the *Lancet*, "episodes utterly alien to the war" and events "in the patient's past history, the revivified emotions associated with which the war incidents have served to awaken, by stirring up similar emotions." One might expect some experience of horror to usurp consciousness and even to build up a permanent delusional system, which does happen at times unless an interpretative therapy comes to the rescue. Nevertheless, the deep-laid emotional experiences and sentiments which make up the personality, chiefly through the unconscious, by their self-assertion in the face of such crises, witness to the measure of their importance and reality.

The psychotherapy of the battlefields and hospitals is permeated with the modern comprehensive viewpoint and conditions there are met in the spirit which takes into account the whole psychical history, recognizes the remote contributing causes and believes in the value of the interpretative attitude toward the patient himself and in his psychic re-education. It is striking to note in passing how frequently hypnosis is condemned as inadequate or actually deleterious. It is also of interest to observe how the demands of reality operate under war conditions to bring the patient back to his normal state, particularly in the acute transient conditions without the psychopathic background. This serves as an intensified illustration of the fundamental principle of psychoanalytic therapy. It is a radical application of the "reality principle" as the royal road to psychic health, a reality specially urgent and particularly effective amid the necessities of war.

Much of interest and much of value is thus afforded in the knowledge of mental disturbances, in the borderland cases as in the distinctively neurotic or pronounced psychotic conditions, and much is being added to the effectiveness of psychotherapy along these lines.

Med. rec. 85:622, April 4, 1914. Psychiatry and Certain Military Problems (Editorial)

The importance of psychiatry in medicine is beginning to be recognized and in consequence its study is being promoted in all medical schools. In most modern hospitals opportunities are provided for the clinical study of psychiatry, for it is felt that in these days when degeneracy appears to be rife it is essential that as much as is possible should be learned of the subject. In a lecture delivered at the summer conference, 1913, of the U. S. Naval War College, by Dr. W. A. White, it was pointed out that psychiatry and the military medical service were intimately related, that is, psychiatry was of great importance to the military service, in so far as by its means the enlistment of defectives might be prevented to a very large extent. White is of the opinion that it is a popular delusion that the ne'er-do-well, the black sheep of the family, will be picked up and made a man of by the discipline of military life. According to his views quite the contrary is the case. The ne'er-do-well is so because he lacks the ability of continuous application, and when he is subjected to the rigid discipline of the military organization, he of necessity endeavors to slip from under the weight of his responsibilities and duties and thus begins that series of minor infractions of military regulation which frequently ends so disastrously.

Mental breakdowns are very apt to occur in war time, and if the subject has certain latent tendencies they will be brought to light by the stress and exigencies of war conditions. For instance, it has been demonstrated that in such circumstances there is an increase in the number of alcoholic psychoses, an increase in the number of psychoses due to syphilis, and an increase in the psychosis of metasyphilitic paresis. Persons with these tendencies are more prone to break down in war time than in the time of peace, and therefore are not fitted to be soldiers. A knowledge of psychiatry would come in good stead to eliminate these unfit from the military standpoint. That an individual with an alcoholic psychosis is not fitted for a soldier's life, at any rate in war time, is self evident, but White shows from the experience gained in the Russo-Japanese war that the syphilitic psychosis is likewise of the first importance. At the Russian Psychiatric Hospital at Harbin, during the war, the percentage of paresis among those brought back from the front was 5.6. Undoubtedly its development was hastened by war conditions and this clearly shows the influence of these conditions upon those who have syphilis.

After discussing temperamental fitness and character the author comes to eugenics and thinks that it would be interesting to construct family charts to see what are the hereditary probabilities in different individuals. Such charts might be considered at the time of admission to the naval academy, and if out of a number of applicants there were in a certain proportion marked hereditary tendencies which might very well come to expression in the particular individual under consideration, perhaps it would be better to put him aside for one with a clearer family record.

In concluding the paper some suggestions were made. In the first place data which are being collected might perhaps present some evidence to a person psychologically trained that they would not present to a person without that training. A psychological analysis of some of the great generals is possible from the literature that exists regarding them. Field work, too, in psychology is possible; and lastly White suggests the readjustment of the service so that men will come into positions of command well before the arteriosclerotic period and the elimination from promotion to higher grades of alcoholics and syphilitics.

Med. rec. 90:109, July 15, 1916. Psychiatric Treatment of Soldiers (Editorial)

There seems to be a certain amount of conflict of opinion as to the effect on the nervous system of soldiers fighting in Europe, of the unprecedented conditions of warfare existing there. It was freely predicted at the outset of the war that the present generation of young men and especially of those of England and France whose vital energies were said to be sapped by city life and self-indulgence would inevitably break down under the fearful strain of war. The conditions of war have been worse than anticipated and it appears on the whole that the fighting men have borne up very well under them. Some say that affections of the nervous system have been infrequent, while others declare that a large proportion of soldiers are incapacitated by such disorders. Perhaps the truth lies in the mean.

In a special bulletin issued in April, 1916, by the Military Commission of Canada, Dr. C. R. Clarke of Toronto discusses the psychiatric treatment of soldiers. According to this authority, the question of caring for returned soldiers suffering from mental and nervous troubles has engaged the attention of the Canadian medical profession in a marked way since the actions of last year. He points out that new conditions have arisen since the use of high explosives and the mental strain during action seems to be of the most severe character, with the result that numerous such cases are encountered requiring special treatment.

With regard to the manner in which such patients should be treated, the writer emphasizes the fact that neither convalescent homes, general hospitals, private houses, nor asylums are appropriate places in which treatment may be carried out. As convalescent homes and general hospitals are obviously unsuitable for the treatment of these cases, under the present conditions cases of marked mental trouble, although curable in the majority of instances, have to be sent to asylums. Of course, this is most unfair and, in a manner of speaking, a tragedy, for not only does it place upon the men the stigma of being certified inmates of a hospital for the insane, but perhaps in the majority of cases it pre-

[illegible] the possibility of successful treatment. In the large proportion of cases proper and intelligent treatment will cure, while it is equally as obvious that unintelligent and careless treatment will tend to aggravate the mental state, and life in an asylum is apt to have the most dire results.

As Clarke says, modern methods demand that recent cases of mental disease should receive just the same attention that cases in a general hospital secure. What should be done is to acquire a house of suitable structure which will afford accommodation for a certain number of patients. The necessary staff is best housed in a separate building. This hospital should be equipped with the most modern scientific, hydrotherapeutic, and electric apparatus demanded in the care of such patients, and especially should the medical attendants be men who have been well trained in the diagnosis and treatment of mental disorders. This, after all, is the most important point. If a correct diagnosis be not made, the patient will not be treated as he should be treated, and a medical man to be able to make a correct diagnosis must be an expert. Also nurses should be specially qualified and should be women of the highest type, as on the sensible nursing of psychiatric patients the outcome largely depends.

During recent years it has been increasingly evident that in order to treat mental disorders intelligently new methods must be devised. Some men are peculiarly fitted by temperament and order of brain to deal with such cases, and these men should be rendered as skillful as possible by long training. We are now on the eve of managing mental affections in a sensible manner, and the war in Europe will, it is to be hoped, tend to develop a really scientific system of differentiating between the various kinds of mental aberrations and of treating each kind on its merits, or rather in the way that its peculiarities call for.

Med. rec. 87:527, March 27, 1915. War Psychoses (Editorial Note)

Much has been written on this subject since the outbreak of the present war, but after all nothing has been unearthed in this relation which has not always obtained in connection with warfare and other catastrophes, like earthquakes. At a recent (January 2) session of the military medical evenings of the Fifth Army (*Munchener medizinische Wochenschrift*, February 9), Singer spoke as follows: "Nearly all soldiers who 'become insane' in wartime are already mentally ill when enrolled. Psychopaths, hystericals—even manic-depressives—get into the ranks. Certain elements work on the psyche at a later date—enthusiasm, rumors, spy fear, etc. The hardships of war cause in psychopathic personalities depressions, neurasthenia, amentia, acute hallucinations. The prognosis here is good. With certain predisposition, shell fire will call forth a fright psychosis. Abstinence from alcohol exerts a favorable influence over war psychoses, and conversely small doses of alcohol in warfare act in excess and cause delirium, convulsions, etc." In discussion Weyert emphasized the fact that in warfare neurasthenics suffer especially from homesickness. Contrariwise the effects of war on some of the subjects have been pronounced salutary by the same author. Von Hecker believes that warfare accelerates the course of paresis.

Morselli, Arturo. War Psychiatry. Paper presented at a meeting of the Royal Medical Academy of Genoa

At a meeting of the Royal Medical Academy of Genoa, Arturo Morselli, consulting neurologist to the First Army of Italy, presented a communication on war psychiatry which he called a new chapter in mental pathology. He excluded from his purview all the common forms of psychosis which the circumstances of warfare had forced from a condition of latency into active development, and those such as alcoholism, epilepsy and dementia praecox, which had already existed when the patients were mobilized. Dealing only with mental aberrations due directly to the war, he said these mostly occurred in an acute form; they were brought on by the emotional excitement of battle, and, in his experience, had a basis of asthenia. He divided them into seven groups: (1) Acute nervous asthenia, mostly in the form of neurasthenia and psychasthenia; (2) hysteria, of which there were many varieties manifesting themselves in dumbness, stammering, tremor, paralysis, convulsions, catalepsy or somnambulism; (3) depression, showing itself sometimes as simple sadness, at others as delirium with ideas of suicide; (4) stupor, sometimes simple, sometimes accompanied by catatonic phenomena recalling those of dementia praecox; (5) hallucinations, coming on in a transient form after emotion; (6) confusional states, having the characters of amentia; (7) in rare cases, maniacal excitement. All forms of war psychosis in the strict sense are, in Morselli's experience, curable within a short period if treated early; it is important, therefore, that the diagnosis should be made at once within the war zone. It is better that a soldier whose mind has been deranged by the conditions of military service should not be sent to a lunatic asylum unless the case proves refractory to early treatment. The author points out the difficulties presented by more or less conscious simulation. It is in dealing with such cases that the experience of the psychiatrist is most useful as, without special knowledge, mistakes are easily made. Once the doctor has made up his mind that the soldier is shamming, the best plan is to send him back to the fighting line. The results of treatment in the psychiatric stations within the war zone are very satisfactory. In some forms of psychosis the proportion of cures within the first ten days is sixty per cent.—Ontario Hospitals for the Insane. Bulletins 9: 6–7, July 1916

Mott, Frederick, W., M.D. Effects of High Explosives upon the Central Nervous System. (Lettsomian lecture no. 1) Lancet, Lond., Feb. 12, 1916, p. 331–38. Illus.

FUNCTIONAL NEUROSES AND PSYCHOSES

The production of functional neuroses and psychoses in a soldier is greatly favored by a neurasthenic condition, whether from a tendency inherited or acquired from the stress of wartime experiences.

The effects of high explosives upon the central nervous system may be divided into three classes. 1. Immediately fatal, either from wounds caused by shell, rocks, etc.; or the person may be buried from the explosion of a mine. Sometimes instant death has occurred in groups of men from the effects of shell fire, yet no visible injury has been found to cause it. 2. Cases in which the detonation of high explosives has caused injuries to the body, including the central nervous system, that have not been immediately fatal. "The number of these cases which do not exhibit any of the functional disorders and disturbances characteristic of what is termed 'shell-shock' without visible injury, although such individuals have received most serious and fatal wounds from exploding shells, leads one to consider that in a large proportion of cases of shell-shock without visible injury there are other factors at work in the production of the nervous symptoms besides the actual aerial forces generated by the explosive." 3. The third group includes injuries to the central nervous system without visible injury. This may happen through direct aerial compression, or by the force of aerial compression throwing the soldier into the air or against the side of the trench, or by blowing a wall or roof down on to him, causing concussion; or by his being hit on the head or spine by a sandbag. Also, he might be buried and partly asphyxiated, or suffer from deoxygenation of the blood through CO poisoning, of which high explosives contain so great a quantity.

When enormous aerial compression is generated, the ordinarily incompressible and hence protective character of the cerebro-spinal fluid is altered, and it is probable that the compression is transmitted to the fluid about the base of the brain, causing shock to the vital centres of the floor of the fourth ventricle, resulting in instantaneous arrest of the functions of the cardiac and respiratory centres. Lord Sydenham concludes that the forces generated are sufficient to cause instantaneous death. It has been estimated that the sudden atmospheric depression in such cases corresponds to a dynamic pressure of about 10 tons to the square yard. "One effect of this is to liberate nitrogen suspended in the blood and transform it into bubbles of gas which are driven into the capillary vessels and cause instant death." A shock of sufficient intensity would also make itself felt in all the neurons composing the central nervous system. Through anatomically and functionally correlated neurons, shock affecting one part of the nervous system may be transmitted to remote parts. "In haemorrhage into the internal capsule, we have a sudden irruption of blood cutting through the pyramidal efferent system of fibres, resulting in a flaccid paralysis of the opposite limbs." A case of hemianopsy, caused by a bullet wound of the skull, resulting in complete blindness, but not deafness, is described as another example of temporary dissociation by shock. This temporary dissociation by shock of anatomically and functionally correlated systems of neurons has been termed diaschisis.

The writer then describes in detail the physiological effects of shock upon the living neuron. The results of these effects may be not only dissociation of the cortical perceptor neurons, producing unconsciousness or a disturbance of consciousness, but for a varying period of time destruction of the power of recollection of perceptions prior to the shock, of the power of recognition, and even complete loss of consciousness of the external world.

An essential for consciousness is a continuous supply of oxygen through the capillary system to the intercalary neurons, otherwise they cease to function, causing dissociation. Any violent emotion affects the vasomotor centre and heart's action, causing a fall in blood pressure and so producing an immediate lowering of oxygen tension in the fluid. This causes suspension of function of the intercalary neurons of the cortex, followed by dissociation of the cortical perceptors and loss of consciousness.

"The symptoms of headache, weariness, loss of power of concentration, irresolution, and mental fatigue constituting a neurasthenic condition so frequently found as a result of shell-shock may be explained by the habit of drawing on the reserve of neuro-potential, and being unable through insomnia or sleep disturbed by terrifying dreams, worry and anxiety to restore the balance and return to the normal conditions of automatic renewal of nervous energy as fast as it is used. Physical shock accompanied by horrifying circumstances, causing profound emotional shock and terror, which is contemplative fear, or fear continually revived by the imagination, has a much more intense and lasting effect on the mind than simple shock has."

The article is concluded with a description of the nature of high explosives and forms of projectiles, and a discussion of theories regarding causation of instantaneous death of groups of men.

Mott, Frederick W., M.D. Effects of High Explosives upon the Central Nervous System. (Lettsomian lecture no. 2) Lancet, Lond., Feb. 26, 1916, p. 441-51. Illus.

Noxious Gases

"Many of the symptoms of CO poisoning are similar to those which I have observed in shell-shock with burial. It must not be supposed that in poisoning by illuminating gas or CO poisoning recovery is always complete, nor that the mental symptoms are always only of a transitory nature. It often takes months for the effects of the poisonous action of CO on the heart and nervous tissue to wear off, and in certain cases the damage is permanent."

The first decided symptoms occur when the blood is saturated with about 30 per cent of CO; with every degree of saturation up to 50 per cent, dangerous symptoms increase until loss of power and staggering prevent escape. Even after prolonged exposure to .1 per cent of CO recovery is possible; with .2 per cent loss of consciousness and power occur and in course of time death ensues; exposure to .3 per cent proves rapidly fatal. As the gas has no odor, soldiers would be unaware of its presence, and lying unconscious or buried in a trench which was being heavily shelled, they might easily be poisoned by the gas without knowing it.

The symptoms of CO poisoning are "headache, which may take the form of distension of the head without pain, ringing in the ears, interference with vision, which may become indistinct and blurred, hallucination of sight and even blindness, giddiness, especially on exertion, powerlessness, yawning and weariness, often vomiting, shivering and feeling of cold, palpitation of the heart, and a feeling of oppression in the chest. . . . When men affected regain consciousness they appear dazed and stupid, and generally have no recollection of what happened. There is mental confusion, and they seem to have no power of concentration of thought, and they are unable to answer questions properly. Indeed, some of them look as if they were recovering from a drinking bout. The slightest anxiety or excitement will bring on a return of the symptoms complained of, such as tightness or oppression in the chest, palpitation and various pains and feelings of distress about the head while beads of perspiration may appear on the forehead. . . . Persons with a nervous predisposition . . . are more susceptible to the effect on the nervous system."

A very important derangement of the mind in CO poisoning is loss of memory. This may be characterized by intense retrograde amnesia together with loss of recognition. Sometimes a whole period of time is erased from the mind. Other symptoms are speech disturbances. The power of speech may be lost for some time or it may come back after many days. In some cases there is difficulty in uttering words, as though it required great effort to speak on the part of the patient. There is often repetition and reiteration of words and phrases. When this affection is of long duration, there are usually other mental symptoms. Tremors frequently occur. "These symptoms so accord with those functional disorders of the central nervous system which have so frequently been found to occur in shell-shock with burial that one naturally thinks it possible that while lying unconscious at the bottom of a trench or dug-out sufficient CO is inspired to cause these severe effects on the mind which some of these cases exhibit."

The writer next discusses histological changes in the brain in CO poisoning, shell-shock, and spinal concussion. Three cases are reported for illustration. Reproductions are given of photographs and photomicrographs, showing haemorrhages and cell disturbances of the brain from the above-mentioned causes.

There may be also poisoning by oxides of nitrogen. This, however, acts more as an irritant on the respiratory passages, causing pneumonia. Pneumonia may also supervene in CO poisoning.

The similarity of symptoms and histological changes in the brains of persons who have died from CO poisoning and those who have died from shell-shock with burial suggests the desirability of examining the blood during life for CO poisoning in severe cases of shell-shock without visible injury and where burial has occurred, especially if some time has elapsed before excavation.

The writer then gives a brief recapitulation of the possible effects of the detonation of high explosives on the nervous system in cases where there is no visible external injury. These are:

1. Commotion from the aerial compression.
2. Concussion with or without burial.
3. Decompression with embolism, by bubbles of N and CO^2.
4. Inspiration of CO during the aerial compression.
5. Prolonged inhalation of noxious gases while lying unconscious or partially buried.

"The mental and bodily conditions of the individual at the time of the shock may be classified as follows: 1. Inborn: (a) Timorous disposition and anxious temperament; (b) Neuropathic or psychopathic inheritance. 2. Acquired: (a) Locus minoris resistentiae in the central nervous system in consequence of alcoholism, syphilis, or previous head injury; (b) Lowered neuro-potential, the result of a post-febrile neurasthenia; (c) Nervous exhaustion, the result of mental stress, anxiety, insomnia, and terrifying dreams; (d) Bodily exhaustion from fatigue, cold, wet and hunger.

"A large majority of the cases of so-called shell-shock admitted with functional neurosis in some form or other occurred in individuals who either had a nervous temperament or were the subjects of an acquired or inherited neuropathy. In a certain number of cases the cumulative effect of active service, often combined with repeated and prolonged exposure to shell fire and projectiles containing high explosives, had produced a neurasthenic or hysteric condition in a potentially sound individual. Some of the worst cases have occurred in soldiers and non-commissioned officers of years' standing—men of excellent physique who have led active lives without any evidence of a nervous breakdown; some, indeed, have fought in the South African War, and in this campaign had been in many battles and engagements without previously exhibiting any neurasthenic symptoms, but at last the nervous system gives way. Such men have not, as a rule, succumbed from a single 'shell-shock,' unless it was one of the big 'Jack Johnsons,' but only after a third or fourth, and when they have been run down with the stress and anxiety of continuous apprehension and dread of the enemy surprising them. On the other hand, there are the more or less rapid breakdowns who give usually a history of either previous head injury, or of a nervous breakdown in ordinary life, or after some special stress indicative of a nervous temperament or a neuropathic disposition. Among the large number of officers I have sent back on account of neurasthenia, a considerable number associated with shell-shock, I have not observed a single case of functional paralysis or mutism."

The remainder of the article is devoted to a discussion of epilepsy as influenced by shell-shock. Brief details are given of 25 cases returned from the front and treated by Dr. Mott. His opinion is that "cases which were said to have developed epilepsy as a result of shell-shock were, generally speaking, individuals whom it might fairly be assumed were either epileptics or potential epileptics prior to the shock."

Mott, Frederick W., M.D. Effects of High Explosives upon the Central Nervous System. (Lettsomian lecture no. 3) Lancet, Lond., March 11, 1916, p. 545-53

SYMPTOMATOLOGY OF SHELL-SHOCK

The symptoms of shell-shock as regards degrees of effects on consciousness may vary from a slight temporary disturbance to complete unconsciousness, with stertorous breathing continuing till death. Sometimes the men wander away from the trenches and are found in a dazed condition unable to account for their actions or to recollect how they came there. This condition is not unlike the fugue or automatic wandering of the epileptic.

The author next discusses amnesia as a condition resulting from shell-shock. Four cases are cited, in three of which music and songs familiar to the patient were used to arouse the power of recollection.

Psychic trauma and the effects produced by terrifying dreams are illustrated by reports of several cases.

Various forms of speech defects are common: mutism, aphonia, stammering, stuttering, and verbal repetition. The most frequent is mutism. Various cases are cited, in many of which cure was effected through a surprise or shock of some kind. The pathogenesis of mutism is described in detail and opinions of various authorities cited.*

Headache is one of the most common symptoms associated with shell-shock. With recovery of consciousness this tends to become acute. The commonest situation for the maximum pain is the occipital region and the back of the neck. The pain is variously described as burning, stabbing, or a heavy dull dizzy feeling, a feeling like a tight hat or a red-hot wire being run through the temples. It is worse at night, and seems to be correlated with thoughts of terrifying scenes and is increased when the mind tries to thrust these aside, or with any effort to concentrate.

Cardiac and vasomotor disturbances are palpitation, breathlessness on exertion, and praecordial pain. There may be physical signs of dilatation and tachycardia. The pulse is often small and increased in frequency; the blood pressure is never high. The hands are frequently blue or mottled and cold, with a clammy sweat of the palms. Surface temperature may be very low. The temperature of the hands varies according to the temperature of the room.

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* For a fuller discussion of the disturbances of vocalization see Mott, Psychic Mechanism of the Voice, etc. Brit. med. j., Dec. 4, 1915.

Cutaneous and deep sensibility of the body may be affected, or, in severe cases, sometimes loss of skin sensibility to all forms of stimulus, and also of deep sensibility are found. The extent and degree of this loss of sensibility is variable. Hyperaesthesia is more common than anaesthesia.

Hearing is often completely lost, frequently together with speech so that there is a condition of functional deaf-mutism. Sometimes a man is deaf on one side only, from a ruptured tympanum or from wax driven forcibly against the drum. Auditory hallucinations are common, and hyperacusis is frequent, exciting the patient's nervous condition and aggravating headache.

Sight may be seriously affected during the acute stage, but it is commoner for the patient to complain of "smoky vision." Failure of accommodation and sluggish reflex are not uncommon in acute stages. Occasionally there is diminution of the visual fields. Some cases of photophobia were met with, but this is usually due to gas or irritating substances in the eye. This was often associated with blepharospasm. A few cases of functional blindness have been treated. Loss of sight, hearing and speech is sometimes associated with acute hyperaesthesia.

Tremors are very common and constitute a serious disability. They may be coarse or fine, general or affecting only parts of the body, continuous during the waking state or absent during sleep. Most often they are rhythmical coarse tremors like those of paralysis agitans. A true functional tremor may be distinguished from a malingerer's tremor by making the patient count slowly and quickly. If the rhythm remains unaltered the tremor is truly functional. A case of functional tremor completely cured by suggestion is cited.

Various tics, which may, however, have existed prior to the war, have been observed. Choreiform movements, probably due to unconscious imitation of other patients, have been noted.

Functional paralyses are frequent, the most common being paraplegia, but hemiplegia and monoplegia are also found. Suggestion of injury often plays an important part in causing and maintaining a fixed idea of paralysis.

There are many different gaits. There are a refusal to walk, dancing tremor as if the legs were on springs, slow shuffling with feet wide apart, dragging the soles of the feet, and a gait assumed by patients who have been allowed to think they have to be supported by two sticks in order to walk, causing a persistent leaning forward, sometimes amounting to a complete bending double of the body. In such cases the supports should be taken away at once.

"Be cheerful and look cheerful is the note that should ever be sounded to these functional cases. Sympathy should not be misplaced although it should be shown to all these poor fellows who have a fixed idea of never recovering: it is not their fault, it is a real thing to them, and no one could be more grateful than these cases of functional nervous disability for cheery words. I use many of these cases that have recovered as object-lessons. I do not find hypnosis or psychoanalysis necessary or even desirable; only common-sense and interest in the comfort, welfare and amusement of these neurotic patients are necessary for their recovery. The conditions at Maudsley Hospital will be all that can be desired. There are light airy wards, and day rooms for meals and recreation, plenty of single rooms for the isolation of cases that are troubled with noises or require special attention; and especially valuable are the baths, so that every soldier can get a warm or cold spray every day. The warm baths, and especially the continuous warm baths, of which there are eight, are especially valuable for promoting the action of the skin, of relaxing the tired muscles, and by their soothing influence helping to induce sleep, so that less hypnotics are required to be employed.

"Diversion of the mind from the recollection of their terrifying experiences is essential for successful treatment. This can be best accomplished by the provision of every form of healthy indoor and outdoor amusements—*e. g.*, books, games and music. These are better in a recreation hall where convalescent patients can enjoy themselves. I have alluded to the hypersensibility of many of these patients to sounds, consequently neither gramophones nor billiards

should be within the hearing of these acute cases. The out-patients' waiting-room will be utilized at the Maudsley Hospital for recreation. . . ."

Mott, Frederick W., M.D. Psychic Mechanism of the Voice in Relation to the Emotions. Brit. med. j., Dec. 4, 1915, p. 845–47

ABSTRACTS OF PARAGRAPHS ON MILITARY PSYCHIATRY

"In my experience at the military hospitals a number of remarkable cases have come under my care illustrating several points in connection with the psychic mechanism of the voice in relation to the emotions. A large number of men suffering from shell-shock, and having no visible signs of injury, have lost their speech, and yet are quite able to write a lucid account of their experiences. This mutism is really an exaggerated form of hysterical aphonia. A woman, owing to an emotional shock may lose her voice; she can, however, as a rule whisper. These men cannot whisper or produce any audible sound. They occasionally show the bodily signs of extreme terror." Sometimes in their dreams these soldiers call out expressions they have used in battle or in the trenches. Occasionally this is followed by a return of speech. The frequency with which these cases of shell-shock suffer with terrifying dreams at night and sometimes in half-waking states during the day means that the emotional shock is exercising an effect upon the mind by thoughts reverting to terrifying experiences, and the same thing probably accounts for the terrified, vacant look of depression on their faces, the cold, blue hands, feeble pulse and respiration, and sweats and tremors.

"The sudden and varied manner in which these mute patients recover their speech is indicative of a refractory condition of respiration in its function of voluntary production of audible sounds in all forms." The author then mentions cases of recovery caused by unexpectedly feeling pain, by tickling, by shouting out in dreams, by involuntarily joining in a well-known chorus, and by various other kinds of surprises.

"As depressing emotional conditions . . . play an important part in aggravating the shock effects of shell fire and maintaining subsequently a more or less transitory functional neurosis in the form of deafness, blindness, paralysis, tremors, and mutism, we may suppose the sudden emotional excitement, especially if it be connected with the preservation of the individual, is followed by such a powerful stimulating reaction on those depressed nervous centres that the refractory phase established in them by the shock is suddenly overcome. I believe this mutism is due primarily to an inhibitory functional paralysis of the voluntary cerebral nervous centres which control the management of the breath and direct its mode of escape through the glottis, mouth and nostrils, for I have seen many cases where they have involuntarily and unconsciously in their dreams talked and uttered cries and swears, but in their conscious state were unable, not only to talk and sing, but to whisper, whistle, utter a cry, cough, or laugh aloud. The worst cases were unable even to blow a candle out. I examined one with the X-rays and found the diaphragm hardly moved in respiration; he could not expand the chest necessary to fill the bellows. Latterly he has acquired this power; he can now take a fairly deep inspiration, but yet he cannot talk or even whisper, cry or laugh aloud; he blows a candle out with the mouth open instead of moulding the lips. Therefore in his case there is an inhibition of the whole voluntary mechanism of audible sound production." The author then describes this mechanism and its double interdependent action of phonation and breath control.

He then discusses the difference between symbolic language, or that produced by civilization, and the universal language of primitive human beings, which expresses itself through mimicry and gesture, and is dependent upon an instinctive preorganized mechanism in the central nervous system. "The effect of emotional shock in the production of mutism is upon this preorganized mechanism which controls the force and mode of escape of the breath in the expression of the emotions and passions. . . ."

"The terror sometimes observed in soldiers suffering from shell-shock is contemplative fear; it is fear made more or less permanent by the imagination fixing in the memory past terrifying experiences, repressed in great measure by conscious activity of the mind during the waking state, but evident in the dreams which afflict nearly all these soldiers suffering from shell-shock and trench warfare."

Mott then cites the case of a soldier through whose brain a bullet had passed, damaging the half in which are located the centres controlling articulate speech, so that he was able to make no voluntary sounds except "oot" for no, and "ah" for yes; yet, if the first word or bar of music of any of several songs was given to him, he was able to sing it through without difficulty. "It must be concluded either that the song had been repeated so often as to have become organized in both halves of the brain or in subcortical lower centres." The soldier recovered a month later his ability to walk and speak.

The article is concluded with a discussion of the interdependence of the psychic and physiological mechanisms of vocalization.

N. Y. med. j. 100:830, Oct. 24, 1914. Mental Disease and Defect in U. S. Troops (Editorial)

The care of the health of armies has led to remarkable discoveries for the health of nations. Yellow fever received its quietus through the efforts of army physicians, and many other tropical diseases, besides malaria, might have lurked for eons in their jungles had not army physicians "got their range" with the microscope and put them to rout. Bulletin No. 5 (Captain Edgar King, *Mental Disease and Defects in United States Troops*) of a valuable series has just been issued by the Department of War of the United States as a result of observations upon patients with mental diseases admitted during one year, either from military prisons or directly from the army, to the Government Hospital for the Insane at Washington. Mental diseases formed twenty per cent of the total discharged for disability from disease or external cause, and dementia praecox was the most frequent, running as high as fifty-six per cent in that year and forty-seven per cent in other years.

The army offers an excellent place in which to observe men mentally afflicted while in the early stages of their disease, and as it lies in the power of the government promptly to remove them from society for treatment, and to keep them from passing on their hereditary taint, the rank and file of the army may be made the medium of an object lesson to show what can be done to improve a nation's mental health, exactly as the Canal Zone offered an opportunity to show how a tropical jungle could be turned into a health resort by efficient sanitation.

The early diagnosis of mental diseases, as well as the segregation of the seed bearers of the inheritable forms, has been considered almost impossible, because of difficulty in recognizing the need of medical care. It is true that the ability to make exact diagnosis of mental diseases has hitherto necessitated the work of a lifetime, for the reason that the present generation of physicians, who have specialized on this subject, is the first to have worked out careful methods of observation, and to interpret apparently unintelligible clues. The opinion of the different states is wavering between the extremes of tender and expensive care for its deficient population and the most drastic measures of reducing the number of unborn defectives. Educational and legislative measures are both under discussion. Here is a chance for the government to demonstrate some practical method of classifying and handling cases according to their menace to the future, as well as to the present generation.

Bulletin No. 5, however, confines itself to the question of early diagnosis. It is practically a detective handbook, written in clear, straightforward English, by which the doctor and officer of the army may learn to recognize mental defects in men who at first sight seem to be merely stupid or stubborn, flighty or conceited, or in some way not susceptible to discipline. There are very clear sketches of dementia praecox, manic depressive psychosis, paranoid mental states, general paresis, and syphilis of the nervous system. These are illustrated by case histories, showing typical acts and conversation, pointing out the delusions and hallucinations that characterize the diseases, and showing how the patients react to discipline, so that it would not be difficult for the careful and progressive army doctor to differentiate between the man who is mentally sick and one who is frankly careless or insubordinate.

Such a clear, definite picture of the common mental ailments, that in their early stages appear so much like exaggerations of temperament or peculiarities of religion or upbringing, will be valuable, not only to the army doctor, for whom it is written, but to college professors, socialist leaders, and men who labor to understand and to control large bodies of laborers. There is an enormous waste to the community in this inability to recognize the mentally deficient worker before he becomes openly stranded in poverty or crime. There are many who could be treated and cured, many who could be saved in a change of environment, and many whom the government should take under its care, even in these early stages, for the sake of protecting future generations. Early diagnosis is the first step; and Bulletin No. 5 is the most practical help in this direction that has yet been offered.

N. Y. med. j. 104:414–15, Aug. 26, 1916. Pathological Accompaniments of Mental Strain in Warfare (Editorial)

Just as mental disease appears to be a growing menace coincident with the more complex requirements of civilization, so does any increase in the tensity of national affairs show a corresponding addition to the number of mental diseases. It was only to be expected that the present war would prove no exception to this rule. The reports which reach us from the firing lines describe conditions which prevail there by such terms as "inferno," "hell on earth," and "orgy of death." Surely it is small cause for wonder that some of the men forced to live through such scenes should succumb under the strain, and that those who are predisposed by reason of some psychopathic determinant in their heredity should manifest psychoses.

In the *British Medical Journal* for March 25, Dr. R. G. Rows called attention to some of the mental conditions found at the front, as observed at the Red Cross Military Hospital, at Maghull. It seems that most of the men who broke down under the stress and were found to have psychoses and psychoneuroses, could be definitely proved to be neurotic; some had had distinctly psychotic attacks in earlier life. Not infrequently the history was of a mild psychotic episode years before with inadequate recovery. By inadequate recovery is meant that the patient instead of adjusting his mental conflict, compromised by leaving the scene. Then he drifted into the army with his mental trouble still dormant. One of these men accidentally shot a comrade; another had a friend shot dead at his side. Shocks of this kind brought back the psychotic symptoms.

Doctor Rows takes an enlightened view of the problem. He thinks that the mechanism of simple mental process should be described to the patient in plain language, and the emotional affect accompanying psychic events and its persistence in the unconscious be explained in understandable terms. In short, a psychic catharsis should be attempted. He believes also that a special hospital with an efficient staff should be devoted to work of this sort.

N. Y. med. j. 104:857, Oct. 28, 1916. The Previously Insane Recruit (Editorial)

One of the most puzzling problems with which the recruiting surgeon has to deal is the determination of the mental status of the candidate for enlistment. Many who are high grade imbeciles, who have previously had a psychosis, or who are potential psychopaths, show very little to the observer, even to the medical man if he is unskilled in psychiatry. Consequently in the ordinary enlistment of men in the United States service which goes on in times of peace, many men are accepted who later manifest psychoses and cause the government much trouble and expense before final disposal is made of them. Should war occur we must expect the occurrence of conditions such as have been observed in all the countries now at war, that is, a rush of volunteers, anxiety on the part of the recruiting officers to swell the ranks at the front as quickly as possible, overwork of the military surgeon, and the natural result, the passing of men who are unfit for duty, physically or mentally.

It is the latter class who are most apt to be accepted to the subsequent detriment of the service. Many cases, for example, have come to the attention of the military authorities in Great Britain. Sir George Savage read a paper dealing with these cases before the annual meeting in July of the Medico-psychological Association of Great Britain and Ireland. He had found that many military surgeons, in their natural desire to help their country and holding the enlightened view that one attack of mental disorder should not be held against a man who had made an apparently complete recovery, had accepted men with such a history, only to have them break down, in training or immediately after arriving at the front. A more careful investigation of the family history then usually revealed that there was bad heredity in addition to previous mental disorder.

The attitude of the friends and relatives of the candidate often seemed to be responsible for the enlistment of such men; they were urged to enlist by employers and others who thought they were cowardly because they hesitated, the real reason being fear of their own condition. Finally, unable to bear the stigma of cowardice, they enlist, tell the surgeon they had a mental breakdown years ago, but are all right now, are accepted, and soon collapse under the emotional stress of warfare.

The consensus of the British experts now seems to be that no such recruit should be enlisted; and this is wise. We should not think of advising a man who had had one attack of tuberculosis to accept a job in a dusty workshop; we should not encourage a man who has had a mental breakdown to put himself in a position where he will be subjected to mental strain. The environment of such persons should be as little exacting and as free from emotional tension as possible, yet the exact opposite prevails in an army engaged in sanguinary conflict. These soldiers will cost any government more trouble attending to the many who break down than the few who escape unscathed are worth to it; and our own country should formulate some method of weeding out these men before the exigencies of war make the problem doubly dangerous. It is impossible to foresee how many of our recruits would break down under the strain of modern warfare, but judging from the increase of insane and nervous invalids in this country the number would be large. This is a phase of preparedness that should be heeded.

N. Y. med. j. 104: 1250–51, Dec. 23, 1916. War and Psychanalysis (Editorial)

Many interesting revelations in the domain of functional nervous disorders have been disclosed by the present European war. In the first place, the old dictum that nervous conditions do not manifest themselves externally has been verified by the large number of neurotic candidates that passed the physical examination only to break down under the first severe strain in the training camps or trenches. It is quite evident that only men with strong constitutions are fit for the mental and moral shocks of war. Another important observation derived from a survey of the nervous victims is the realization that modern warfare imposes tremendous nervous tension and mental strain, so that adequate provision should be made to take care of all the neuropaths. This is a phase of preparedness that we should do well to keep in mind, and in which we may profit by the experience of others. Finally some interesting light has been gained from the war concerning Freud's theories of the psychoneuroses, and the value of psychanalysis as a form of mental training. The severe demands of war and the rigid discipline of military training have quickened the instinctive emotions and transformed the repressed energies into great and heroic bravery. Suppressed desires and buried complexes may be factors in the blight of overcivilization, but in time of war these primal instincts find an outlet for themselves in the call of duty and patriotism. However helpful psychanalysis may be in time of peace, in time of war such methods appear unnecessary and undesirable. In fact, the conviction is forced on us that well directed discipline is superior to psychanalysis at all times, and that personal development and happiness cannot be divorced from self sacrifice. It is fair to assume that some of the concepts regarding the fixation of the libido, and the correct psychanalytical treatment will be greatly influenced by the experiences of the war.

Osler, William. Functional Nervous Disorders. J. of Amer. med. assoc. 64: 2001–02, June 12, 1915

"Types rarely seen in males in this country or in the United States are very common, and an explanation is to be found in the extraordinary stress and strain of trench fighting."

Shell-Shock Paraplegia.—Causes lack of consciousness or a dazed condition lasting for several hours, with a paraplegia lasting often for weeks and gradually disappearing. Reflexes are increased, sometimes there are hypertonus of the muscles, hyperesthesia, and difficulty with bladder and bowels.

Psychic "Knock-Out."—Due to shell shock. The victim remains in a state of stupor, with loss of memory and speechlessness or stammering, recovery following in a few days. A condition of irritability often persists for weeks.

Involvement of the Special Senses.—Very common. Accompanying conditions are headache, tic, constant blepharospasm, photophobia, monocular amblyopia.

Functional Dysbasia.—All sorts of anomalous gaits are encountered. Case described.

Functional Spasm of Leg Muscles.—Cases given. Treatment by massage and electricity. The use of tobacco has a deleterious effect upon recovery.

The rest of the article is devoted to a discussion of the effects of gas poisoning.

Régis, E. Précis de psychiatrie. 5th ed.

The latest edition of this well-known textbook states that it would be impossible to eliminate from the army and navy psychical degenerates as well as physical degenerates. The mental state should be studied by the examining board at the time of enlistment and also during active service. A very common mental disease among officers is general paralysis. One may also observe traumatic and alcoholic psychoses, maniacal and melancholic states, and systematized delirium. Thus among soldiers we find all the psychopathic disorders, such as alcoholism, systematized delirium, maniacal and melancholic states, epilepsy, nostalgia, epidemic suicide, etc., but degeneracy prevails, with or without delirium. Such degeneracy is either simple (unstable, old and eccentric people, feebleminded, imbecile, and idiot) or congenital (neuropathological or psychopathical manifestations). Amongst abnormal soldiers, pathological fugue is most frequent (illegal absence or desertion). Consequently, when a soldier runs away it is necessary carefully to study his mental condition. In all cases the medical expert must observe, ponder, and wait before deciding upon responsibility or simulation.—R. F. Sheehan, U. S. naval med. bull. 8: 485, July 1914.

Régis, E. Psychic and Neuropsychic Affections in War. . . . tr. in Bost. med. and surg. j. 175: 784–92, Nov. 30, 1916

In regard to the psychoses and neuropsychoses of war, "among the principal points emphasized by the Russian psychiatrists, such as Jacoby, Chaikewitch, Serge, Soukhanoff, Oreretzkowsky, Vladitchke, Ermakoff, Awtokratow, and Cygielotrejch, or by the English, such as Stewart and Kay, may be cited: First, the great frequency in modern wars of cases of psychoses and psychoneuroses—a frequency such that the Russians had to establish at Kharbine and at Moukden in Manchuria, psychiatric hospitals. Second, the predominance of acute, often transitory, psychoses and neuropsychoses clinically analogous to those resulting from severe accidents. Third, the particular multiplicity of cases of this sort following maritime battles. Fourth, the necessity of psychiatric care for armies on campaign, consisting of improvised hospitals in regions sufficiently remote from the base of operations and from the passage of troops."

The author agrees with Jacoby from the nosologic point of view on the fundamental characteristic that the suddenness, extent and horror of the modern battle act as "cosmic catastrophes" causing epidemics of psychic disturbance. Two of Régis's pupils, Laures and Hesnard, have published observations concerning this theory. The author upholds Jacoby also as to the value of organizing a special psychiatric service in case of war.

"The solution adopted by Russia, of special hospitals for the insane improvised at sufficient distances from the field of operations, is certainly the best. In case of need, even special pavilions annexed to ordinary field hospitals would suffice, on condition that their medical direction was entrusted to specialists. The psychoneuroses or psychoses from moral shock, which predominate in great cataclysms and great battles are, in fact, in the large majority of cases, essentially acute, transitory, and curable in a few days. On the other hand, no treatment is better suited to the acute psychoses of all forms than rest in bed. . . . These pavilions would serve at the same time for the traumatic insane and for the post-operative, who would evidently be more numerous in the circumstances of which we speak.

"It is an organization of this sort which Professor Simonin of Val de Grace also recently urged in his conference of December 13, 1912, with the federal union of reserve and territorial physicians, on psychoses of wartime and psychiatric aid in the field." Among authorities who have written works on this subject the author mentions his colleague, Tactet, Stier of Berlin, Drastich of Vienna, and Kay of Bristol.

From August 1914, Dr. Pouchet, director of the health service of the eighteenth district, established a central psychiatric service for the care of mentally and nervously disturbed soldiers at the military hospital at Bordeaux under the direction of Dr. Salesses.

Cases observed up to December 31, 1914, to the number of 150, may be divided into two classes: First, psychoses in soldiers who have not been under fire, of which there were sixty-two. Second, psychoses and neuropsychoses of soldiers returning from the front and induced by battle. Of these there were eighty-eight.

Psychic Disturbances

Hallucinatory oneirism, or morbid dreaming, caused by emotional shock and only temporary in action, never lasting more than two weeks, accompanies all cases affected with psychic or neuropsychic disturbances following battle. Since the declaration of war, hallucinatory oneirisms of battle have appeared also among alcoholics who have remained at home or at garrisons.

The other predominant syndrome in the psychic disturbances in question is that of mental confusion. It is of sudden onset, not usually of long duration, and its essential characteristic is amnesia, usually total. This condition may be accompanied by the most vivid and agonizing recollection of the event that produced the shock, a fixed idea by day and a terrifying hallucination by night reproducing itself always during sleep.

Etiology

The predisposition in patients affected with mental confusion and hallucinatory oneirism is not an hereditary one. The hereditarily disposed are usually weeded out by their predisposition before the firing line is reached. A true emotional constitution is the particular predisposition for the psychoses of battle. Neither is the physical traumatism the occasioning cause. Of fifty patients, twenty-two had been wounded and twenty-eight had not. Other causes, besides this principal one of violent emotional shock in impressionable individuals of a nervous temperament, are physical and moral fatigue, long marches, perpetual alertness, insomnia, and prolonged inactivity in the trenches. It is an interesting fact that these psychoses affect preferably men of the reserve, and are most intense, especially in the amnesic form, in officers.

Diagnosis, Prognosis and Treatment

The important point in diagnosis consists in differentiating these psychoses of battle from the ordinary psychoses, or manias. Cases of psychoses of battle are usually of a transitory nature, and should not be considered as cause for commitment to an institution, but should be treated by a military psychiatric service established at the seat of each division of the health service. These, like the delirious wards existing at Bordeaux and Paris, and those established in 1900 in the marine hospitals, should be composed primarily of several cubicles or isolation chambers for the violent, and an open ward for the calm and inoffensive. These, especially the cubicles, should be on the ground floor and near together. This central service should receive not only subjects from the military hospitals, but also those from the temporary and auxiliary hospitals of the city and of the neighboring regions. The wounded in need of psychiatric treatment may, according to the nature and degree of their psychic disturbance, remain in the surgical wards, or go to the psychiatric centre and have their wounds dressed there by the hospital surgeons. "It is indispensable to entrust the psychiatric service to a specialist, supported by at least one assistant and by a competent personnel of attendants whom he shall train. . . . The function of the physician in these regional centres of psychiatry is at once delicate and manifold. It consists essentially first in receiving all soldiers afflicted with disturbances predominantly psychic, observing them, and establishing a diagnosis at once rapid and exact; second, in referring without delay to the neighboring insane asylum those affected by mania, . . . third, in treating and curing as quickly as possible those capable of rejoining their commands in a few weeks, and in forming on the other hand a suitable decision in the cases of those more severely affected, particularly those presenting confusional associations." Delirium caused by acute infectious disease must be carefully differentiated from insanity by employing every measure of diagnosis, physical as well as mental. "It is obvious that the specialist in charge of the central psychiatric service should, at the same time, fulfill the functions of expert in the war council of the region, these functions being in time of war more important and active than ever. It is thus that affairs have been organized at Bordeaux since the beginning of hostilities."

NEUROPSYCHIC DISTURBANCES

These are closely related to the psychic disturbances. Epilepsy is rare. Neurasthenia is more frequent, especially among officers. Hysteria presents the most varied, unusual and peculiar cases: syndromes of terror, trepidation, spasm, tic, convulsions, impotence, anesthesia, paralysis, urinary incontinence, blindness, deafness, mutism, somnolence, delirium, sometimes transitory and disappearing at the least suggestion, sometimes tenacious and resistant to the highest degree. One of the most frequent of these is the syndrome of functional paraplegia or pseudoparaplegia. Observations were made at the suggestion of Inspector-General Delorme in temporary hospitals numbers 4 and 78, directed by Drs. Bergonie and La Grange. Patients first have more or less disability of the legs, cutaneous sensibility is more or less diminished, especially in the lower extremities, reflexes are variable, and there are usually headache and variable pains. The cause is undoubtedly violent emotional shock. No sign of organic lesion was observed in the cases studied, hence we may draw the conclusion that the malady is purely functional and develops only in predisposed subjects. Others who have studied and reported cases of functional paraplegia are Dejerine, Babinski, Sollier, Moulinier, Drivet and Bernadou.

Richards, Robert L. Mental and Nervous Diseases in the Russo-Japanese War. Mil. surg. 26: 177–93, Feb. 1910

In the Russo-Japanese war, for the first time in the history of the world, mental diseases were separately cared for by specialists from the firing line back to the home country.

After a brief sketch of the care and treatment of the insane in Japan, Captain Richards takes up mental disease in the Russian Army during the Russo-Japanese war. The number of cases was unusually large, reaching possibly 1,500 up to 1904, and 2,000 in 1905–1906. Harbin was early selected as a central point for collecting these cases. "The number of admissions increased rapidly from month to month, being six times as many the last month as the first month." Because of this increase, the army medical department could not provide for the cases, so the work was taken over by Professor Awtokratow, of the Red Cross Society of Russia. A hospital and dispensaries were established, an ambulance followed the troops for cases occurring during action, and whenever possible, cases were sent to Russia. Captain Richards describes in detail the wonderful work done by Professor Awtokratow and his staff of doctors and nurses, not only in the hospital and dispensaries, but also on the field and on the way back to Russia, both on land and sea. Two tables showing the character of the work at the central psychiatric hospital at Harbin are given.

The psychoses of war are chiefly depressive in character. Fear of the comparatively harmless gas-bombs of the Japanese was one form of psychosis.

Richards, Robert L. Study of Cases of Mental Disease from the Standpoint of the Military Surgeon. Mil. surg. 26: 527–38, May 1910

"For a long time mental diseases have been regarded the least understood of all the diseases with which the military surgeon has had to do," and there is very little information about case histories available. The reasons for this are threefold: first, military life exposes soldiers to unusual stresses, resulting often in acute mental diseases of comparatively short duration, with very large recovery rate; second, in all mental disease the hope for recovery is almost exclusively in the early stages before permanent damage is done to brain structures; and, third, unless there is a record of the facts observed in the case before its transfer, the authorities at the government hospital have very little from which to judge of the early stage of the disease, and are often hampered in this respect in judging the character of the mental disease and its probable termination.

In order that these difficulties may be met and disposed of in the environment in which they arise, a "Scheme for History and Examination of Mental Cases" has been issued by the Office of the Surgeon-General (March 24, 1910). This scheme is more simple and concise than most of those used in foreign clinics and so meets better the requirements of the army. The author quotes the scheme in full. It comprises data as to family history, history of patient, present illness, general physical examination, neurological examination, and mental examination. Captain Richards follows the scheme with comments upon the different sections, treating especially in detail the section for mental examination.

Richards, T. W., translator. Nervous System and Naval Welfare.* U. S. naval med. bull. 8: 576–86, Oct. 1914

We have noticed that from year to year, among the affections observed in the navy, mental and nervous diseases together, exactly those which concern us here, are becoming more and more prominent. Thanks to the more extensive experience acquired, attention is being given to the mild cases which appear insignificant and which were formerly treated with neglect until the day when it was perceived that they became aggravated, to result in general and prolonged disorders and to the great detriment of the individual and of the navy. . . .

"The medical officer who has occasion to observe these cases will quickly discover that two great groups of affections appear with particular frequency, while many others show themselves with surprising rarity, considering so large a field. These two groups are on the one hand, the mental disorders of young men, and on the other the nervous exhaustion (neurasthenia) of those who have served one or more enlistments.

"Reports based on figures from the last great wars show that the number of mental diseases is greater for all combatants, but in particular for the officers. The number of cases increases a little after the outbreak of the war, reaches a maximum when the war attains its full development, and does not fall again until long after it has ended. For the Russian Army during the last war the

* The original article, entitled "Gesunde Nerven und Seekrieg," appeared anonymously in the *Marine-Rundschau*, v. 21, no. 9.

figures rise to two cases per 1,000 (total of all forces). For the army in the field one notes especially cases of excitement and mental confusion. Individuals placed in a state of lowered resistance by alcoholism, former illness, or hereditary taints were the first to be attacked. If, as we have said, an increase in the number of these cases is a fact signalizing every war, this proves that among all the men assembled many carry the seeds of an affection perhaps already recognizable by the alienist; others have had nervous trouble during their youth which will become aggravated under the influence of fatigue until manifested by symptoms which can be no longer overlooked. Mental maladies are becoming known better and better; and if the number of cases cited in reports is increasing, this increase may be accepted with satisfaction as a sign that we understand more clearly how to search for and recognize these affections."

The author then discusses neurasthenia, particularly in its relation to naval warfare. He states that it attacks especially continuous service men, and in most cases makes them unfit for further service. Nearly always the origin of the disability is attributed to unfavorable circumstances in navy life, a fact well recognized by the board charged to decide the question. There is not a single branch of the service which has not been cited as a cause—temperature, lack of ventilation, poor or insufficient food, laborious service in the engineering department, at the guns, on the bridge, or fatiguing mental work. "While we cannot scientifically admit that these factors act as unique and exclusive causes, . . . one understands, nevertheless, that when they exert their action on a nervous system already enfeebled, they aggravate a pre-existing morbid state to the point of rendering the individual unfit for further service." Heredity, family conditions, defective economic conditions, the inability to adapt readily to new conditions, over-zealous ambitions, and finally alcoholism, all play an undeniable role in the development of neurasthenia.

Are there remedies for any of these conditions? Men incapacitated by heredity and psychopathic make-up can be eliminated to a great extent by more exacting examination of recruits. Those who find themselves unable to adapt themselves to the demands of the service should be advised to leave it, for their own good and for the good of the navy. The unfavorable circumstances in navy life, however, can be remedied to a great extent, and these reforms are being carried out, particularly as concerns the men of lower ratings. The officers are still overburdened with responsibilities, anxieties, and long and monotonous duties that require unbroken exhausting activity. It is very desirable that some of the ameliorations affected by hygiene be applied to this situation.

The author summarizes his conclusions as follows:

"The primary requisite for the success of a fleet in a naval war is a healthy personnel so far as concerns the nervous system.

"All possible measures should be taken in the fleet to overcome the damage caused by individuals defective in this respect in view of grave developments, and to assure selection of men in the best of conditions.

"If it appears that, in recent years, there has been a slight increase in diseases of the nervous system this fact need not cause anxiety regarding sanitary conditions. On an average, the crews are in condition to meet any exigency.

"Medical officers must eliminate weaklings from the navy and see that they are replaced as far as possible, by an equal number of sound men.

"There is no peril in the present situation. Diseases of the nervous system are only a menace to an exhausted people who cannot make good their deficits."

Riker, G. A. Treatment of Insane in the Navy; being a Discussion of the Temporary Treatment of Mental Aliens Prior to their Commitment to the Government Hospital for the Insane. U. S. naval med. bull. 7: 77–86, Jan. 1913

This article is confined to conditions arising early in psychoses, with suggestions for treatment.

"The mental diseases most commonly observed in the navy are dementia praecox and manic-depressive insanity, with an occasional case of paresis, alcoholic delusional insanity, Korsakoff's disease, the psychoses sometimes associated with epilepsy and rarely paranoia."

As ordinary methods of treating cases of mental disease are almost impossible on board ship or in naval hospitals, members of the hospital corps must closely watch all patients, first, to study the case for treatment; and, second, to prevent self-destruction, or injury to others or property.

Some points to be investigated follow:

1. Endeavor to procure as detailed as possible an account of patient's former life and of his family.
2. History of oncoming attack, attitude toward and character of his work, manners, recreations, personal habits, domestic relationships.
3. Careful physical and mental examinations, noting all symptoms of mental abnormality.
4. An accurate account of the patient's present actions and habits must be recorded.

"While the patient with suicidal tendencies is a constant source of anxiety to a medical officer of a hospital for the insane, that anxiety is increased tenfold with the medical officer of the navy, as he must leave his patient in the care of men untrained in handling the insane, and often in quarters that are not desirable for such cases: the latter is particularly true on board ships, where it is frequently necessary to place such patients in the brig for safe keeping."

The writer then takes up the question of establishing special pavilions for the reception of such cases.

"Primarily we must have constructed at several of our hospitals a special pavilion for the reception of these cases. It would be advisable to have these additions at Boston, Washington, Mare Island, and Canacao, in order that all persons of the naval service becoming insane at Newport, Portsmouth (N. H.), and Chicago can be immediately transferred to Boston; those from New York, Philadelphia, Annapolis, Norfolk, Charleston, and Port Royal could be gathered at Washington; Mare Island acting as the receiving ward for Puget Sound, Samoa, and Las Animas, and Canacao receiving insane patients from Guam and the remainder of the Asiatic station."

The type of construction suitable for a hospital for mental patients is described in detail. Instructions for members of the hospital corps are given in full for care and treatment of mental patients.

Roncoroni, L. War Mutism. Il Morgagni 58: 424–26, May 10, 1916. Presented at a meeting of the Medical Society of Parma

At a meeting of the Medical Society of Parma in November, 1915, L. Roncoroni reported four cases of war mutism (*Il Morgagni*, May 10, 1916). Two of the patients had an evident predisposition to mental disease, one of them having attempted suicide some years before, while the other at the age of sixteen, after seeing an apparition of a woman clothed in white in his room at night, remained three days without being able to utter a word. The affection also occurs in non-combatants; one of the patients was an orderly, and another a chauffeur employed in collecting wounded. Although the condition is known as war mutism, in the author's cases there were other phenomena—sensory and motor, organic and psychic—besides the loss of speech. One man was the subject of automatic motor symptoms with rhythmical movements of the head—flexion, extension, and from side to side—and twisting of the trunk, which lasted four days consecutively. Two had some muscular hypertonia, especially in the lower limbs; in three there was definite diminution in sensitiveness to pain. In one there was exaggeration of reflexes superficial and deep, and immobility of the eyeballs, so that the man seemed to be always staring at one point. There was an arrest of all the higher psychomotor functions. In the first days the patients were motionless, and incapable of reacting to external stimuli, or manifesting a spontaneous activity except in regard to taking food and emptying the rectum and bladder. In most cases sleep was not disturbed. The power of writing was always recovered before that of speech. In three cases the more important symptoms disappeared after three to ten days, and in a fortnight or three weeks cure was complete, except in the case of the man who had previously attempted suicide. In all the cases there was loss of memory, which lasted some days. Roncoroni holds strongly that war mutism is not hysterical in nature.—Ontario Hospitals for the Insane. Bulletin 9: 9, July 1916.

Rows, R. G. Mental Conditions Following Strain and Nerve Shock. Brit. med. j. 1: 441–43, March 25, 1916

A brief sketch of the work which is being done in the Red Cross Military Hospital, Maghull, in connection with mental and nervous disturbances.

"Judging from reports recently published in France—and these are fully corroborated by our own experience—it seems improbable that examination of the cases invalided from the war will add very much to our knowledge of the symptomatology of these conditions. On the other hand, such an opportunity to investigate a large number of those suffering from psychic disturbances during the early stages of the illness has never been provided before."

Description follows of cases suffering from intense fear or horror caused by some terrifying event, and from hallucinations relating to some experience at the front, complicated often by terrifying dreams or memories of experiences in earlier life with which a strong emotional tone was connected.

"It is the strong emotional factor which so compels the attention of the patient." Treatment can be successful only through the physician's gaining the confidence of his patient as early as possible and so making him co-operate in his own cure by an understanding of his condition and a consequent removal of the mystery of his illness and the attendant fear.

Schier, A. R. Detection of the Feebleminded Applicant for Enlistment—Value of the Binet-Simon Scale as a Diagnostic Aid. U. S. naval med. bull. 7: 345–60, July 1913. Illus. References

On account of the startling increase of mental defectives, it becomes the serious duty of the medical officer to examine carefully into the mental status of all applicants for enlistment, using every diagnostic measure to exclude mental misfits. Idiots and low grade imbeciles are so easily recognized that their exclusion is a simple matter, but the detection of the high grade moron, often physically perfect, attractive and bright looking, presents difficulties to be solved only by the use of some kind of mental test. The Binet-Simon system was tested on a series of applicants for enlistment at St. Paul.

From testing 100 applicants by these scales, the following results were tabulated:

Number passing 15-year tests	89
Number passing only 11-year tests	6
Number passing only 10-year tests	1
Number passing only 9-year tests	4
	100

Of the eighty-nine classed as normal, fifty-two were rejected on account of physical defects, leaving thirty-seven desirable for enlistment.

Physical defects were more frequently found among applicants failing on the fifteen-year tests, occurring in seventy-two per cent of those failing, and in only fifty-eight per cent of those passing. Three of the eleven given a mental age of from nine to eleven years were perfect physically, and no mental defect was made evident by their appearance, behavior, or manner of talking. The ordinary reading and writing test would have been passed by them and they would have been accepted for enlistment.

Conclusion—"The Binet scale in the examination of applicants for enlistment is practical and is a quick method of estimating their mental status, and therefore is an aid in the detection of mental feebleness which would otherwise pass unrecognized."

Schier, A. R. The Feebleminded from a Military Standpoint; Suggested Examination for Their Early Detection. U. S. naval med. bull. 8: 247–58, April 1914

The author introduces his subject by a discussion of the asocial character of mental defectives and of their consequent inability to adapt themselves to any kind of employment requiring application, judgment or a sense of responsibility. "From a military-naval standpoint this problem is no less important and presents an interesting and fertile field of study for the medical officer. . . . That such individuals can not adapt themselves to military life is certain. Such ideas as duty, obedience, truthfulness, and patriotism are entirely foreign to them. They tire early of instruction and can not adjust themselves to the changed conditions of the service. If left to carry out instructions or called on to think for themselves, their lack of dependability becomes manifest. When brought in contact with normal associates they soon feel their incompetence and become discontented and discouraged, which, added to their lack of stability, leads to desertion from the service. Others may resort to the misuse of alcohol, and while under its influence commit various offenses for which they are punished. Again, others become very irritable and at times develop periods of excitement, and finally definite psychoses.

"From an experience among the military offenders confined at the Naval Disciplinary Barracks at Port Royal, S. C., Passed Assistant Surgeon Mann, U. S. Navy, concludes that from three to ten per cent of the culprits there should be treated solely by alienists. Some one versed in psychiatric diagnosis, he believes, would perhaps materially enlarge this number. Further, that in from ten to thirty per cent the assistance of either the physician or alienist would greatly aid the penologist in his efforts to reform these culprits.

"The diagnosis of this degree of mental defect at the time of enlistment is, needless to say, extremely difficult. Certain it is, that it can not be detected by a casual inspection and a reading and writing test. To meet with any degree of success the examining officer needs a system of examination which will test the various mental functions, especially the power of attention, good sense, judgment, capacity to initiate, and adaptability. On the recognition of such points the diagnosis of a normal mind must rest. Such a scheme of examination should be standardized so that it can be given by different men and yet obtain fairly constant results by eliminating any serious personal equation. With a view of devising such a scheme the writer has been trying many mental tests. . . . As a result of this work a group of tests, believed to be suited for recruiting examinations, was selected and is submitted for further trial. This scheme of examination is not intended to bring out every form of mental defect, but an experience with it so far has shown that it will be a valuable aid in diagnosing the high grade feebleminded, whose deficiency would otherwise be recognized only after weeks of observation at the training stations. . . . The tests are very simple and easily given. It is their simplicity which may cause some to doubt their value, yet each one determines some phase of mental capacity. All applicants to whom they have been applied have been eager to pass them successfully. This is of decided advantage and adds to their value, inasmuch as they test to the fullest extent an applicant's mental capacity. It is also in favorable contrast to the use of such tests on criminals, who, being wary and suspicious, are inclined to show indifference as to their results. The examination should be conducted in a quiet room to avoid any distraction. The applicant should be urged to do his best and never should any replies be criticized. The family and personal history should be inquired into before beginning with the tests proper. The applicant should be questioned in reference to the number of years and the kind of schools he has attended; whether he has ever been an inmate of a state institution, and what his present and previous occupations have been, so as to learn how frequently he has changed from one kind of work to another. The results of each test are scored."

The author then states the tests, ten in number, in the order in which they are to be given, following the statement with a brief explanation of each test.

It was decided that for the purpose of differentiating the applicant of normal mentality from those unfit for service, seven tests should be successfully passed, and that thus ninety per cent of the feebleminded would be eliminated.

Schier, A. R. Review and Possibilities of Mental Tests in the Examination of Applicants for Enlistment. Reprint from U. S. naval med. bull. 9: 222–26, April 1915

A brief review of some of the results with mental tests at the Marine Corps recruiting station, St. Paul, Minn., and suggestions of possibilities indicated by their use.

The writer states that a year's application of the tests described by him in his previous article, "The Feebleminded from a Military Standpoint," has demonstrated no need of change in the tests themselves. "The range of mentality measured by them is sufficient for the purpose for which they are intended, namely, the detection of the so-called moron. . . . By far the large majority of morons fail to score a passing mark with these tests, yet some will pass all of them. It is unreasonable to expect any series of tests to reveal every form of mental defect, or to detect every type of offender or criminal."

A modification in the method of scoring in these tests was found necessary; that is, each test was given a relative value according to its difficulty, instead of the equal rating, that was originally used, thus relating the method to the Yerkes-Bridges point scale.

"One hundred consecutive physically qualified applicants were examined with these tests and marked in accordance with the point scale. . . . Reports on the intelligence, aptitude for the service and behavior of many were received from the recruit depot, subsequent to enlistment." Here tables showing a classification into four groups according to degree of mental ability, and of mental ratings and other data of interest gathered both before and after enlistment are introduced. "It will be seen from a comparative study of these tables, that the mental ratings given after a period of observation at the recruit depot in the main correspond with the degree of mental ability found at the recruiting station, as indicated by the number of points scored. This may be regarded as evidence of the accuracy of the tests to determine the grade of intelligence."

The four groups into which the writer divides his 100 applicants, as a result of the tests and further observations are as follows:

A	Well above to average	Safe and dependable
B	Above to average	
C	Average to doubtful	
D	Mentally deficient—subnormal or feebleminded	

"This classification . . . based as it is on only 100 applicants, would undoubtedly be materially changed if larger numbers were examined. However, it points out a line of research which it might be well to undertake."

The author draws the following conclusions:

"The continued examination of applicants for enlistment with the series of mental tests . . . has demonstrated the usefulness of these tests in detecting feeblemindedness.

"Only in so far as habitual offense, unmorality, and criminality are the result of feeblemindedness, are such tests of diagnostic value.

"The method of scoring first used has been modified by working out a point scale, based on the relative difficulty of each test.

"On the basis of points scored, and conduct and efficiency after enlistment, men may be classified into safe and dependable, doubtful, and mentally deficient groups.

"A classification according to mentality could be established only after large numbers of men had been listed and their conduct subsequent to enlistment noted.

"Investigation looking toward the establishment of such a classification, it is believed, would be of value, inasmuch as it would eliminate many hitherto unrecognized mental defectives from the service."

Sheehan, R. Exclusion of the Mentally Unfit from the Military Services. U. S. naval med. bull. 10:213–49, April 1916. Illus. by photos of mentally unfit types. References

The writer demonstrates, by quotations from statistical tables presented in the annual reports of the Surgeon Generals of the Army and Navy, that mental and so-called nervous diseases among enlisted men and officers are responsible for much nonefficiency and disability in the services, and large expense to the government. Of cases admitted to the Government Hospital for the Insane from the Navy, "it is estimated that about fifty-four per cent show predisposition to mental disease prior to enlistment. As to the form of insanity which service men are most likely to develop the records show that over fifty-six per cent were diagnosed as dementia praecox. That of general paresis was made in about twenty per cent, cerebral syphilis three per cent, manic-depressive psychosis about two per cent, miscellaneous about twenty per cent." The large proportion of dementia praecox cases is not remarkable when it is considered that this disease is essentially of the adolescent period. Because of the preponderance of this type of insanity, the writer describes in detail the type of individual prone to develop dementia praecox, its symptoms, etiology and pathology, and gives cases.

The feebleminded include those individuals who are deficient in the sphere of intelligence. "Of course only the milder grades should cause any diagnostic difficulties. . . . Great assistance was expected from the use of the Binet-Simon scale. However it has not been found that this, in its present form, is adaptable to service use. . . . Of more value is the knowledge of the reactions of the subject to his environment. A cross section of his career will give us the most valuable data on which to base his exclusion." Case histories follow.

Psychopathic characters are individuals who are "failures of mental adaptation." They are not feebleminded nor insane, but are clearly abnormal mentally. This group includes the so-called defective delinquents, the moral imbeciles, the constitutional psychopaths and inferiors, and the pathological liars and swindlers. Cases illustrating these types are described.

Prison psychoses is a term "applied to the group of psychotic complexes which can not be satisfactorily classified under any of the regular terms used to denote mental disease entities. . . . The term is of value as it emphasizes the etiologic potential of imprisonment as a provocative agent in the causation of psychotic states requiring hospital care." Citation of cases follows.

Psychoneuroses comprise the minor psychoses, and are responsible for most of the cases of mental disturbance in officers. Neurasthenia, hysteria and various kinds of obsessions are included in this group. Individuals suffering from this type of mental disability are unable to adapt themselves to the conditions of everyday life and so spend their energy in useless conflict. "They can only be eliminated by careful attention to their life history, and if it is found that they have always manifested an abnormal character of reaction, which has persisted in the service, it may be concluded that it is 'constitutional . . . an abnormality of make-up.' They should be passed upon by boards of medical survey and discharged for disability not in the line of duty."

Dr. Sheehan devotes the remainder of his article to a consideration of epileptics, syphilitics, alcoholics and drug addicts in the service, and concludes with a selective list of twenty-three references.

A special feature of the article is a series of reproductions from photographs of individuals illustrating the various types of mental unfitness for military services.

Sheehan, R. Malingering in Mental Disease. U. S. naval med. bull. 10:646–53, Oct. 1916

"Malingering is the effort of an individual to overcome a difficult situation by the production of mental symptoms. There is getting to be a more generally held opinion that it never occurs in normal persons. . . . It is not always true that malingering is an entirely conscious reaction, as it is often beyond the awareness of the individual, occurring in the subconscious. It is this which makes it difficult to determine which of the symptoms presented are genuine and which malingered. Because of their abnormal make-up these individuals are apt to cause difficulties if they succeed in getting into the military service. Oftentimes they are personally desirable and are enlisted without question. After enlistment, when compelled to contend with service demands and restrictions, because of their psychopathic make-up it is not long before they get into difficulties by coming into conflict with authority or by deserting. If this results in placing them under stress, what appeals to them as the easiest way out is to exhibit mental symptoms." Surgeon Sheehan devotes the rest of his article to a citation of detailed cases of malingering in the service.

Sheehan, R. Service Use of Intelligence Tests. U. S. naval med. bull. 9:194-200, April 1915. References

The author describes the Binet tests and comments as follows upon their unfitness for service use. "Stuart states that there is a likelihood of wide discrepancies in the use of these tests when made by different observers. They should not be considered an instrument of precision and will probably never become exact, and Healy . . . says: 'In considering the scientific exactness of results we must remember that there are many delicate possibilities of variation ever present. These may occur through the many varying conditions of the investigator, the one investigated, and the medium of investigation.'"

Since great variance in results is noted with trained workers, as used by untrained examiners these tests are almost valueless. Goddard says: "The attitude of the examiner is all-important." Healy states: "It is very clear that judgment by means of tests as to the possible existence of those abnormal states which constitute insanity is often a matter for those with a highly technical training and experience."

These tests are only indicative and of value when estimated with other considerations. "The Binet system, with its rather cut and dried standards, is useful mainly as an exploratory procedure." Binet himself never intended to measure with the scale general ability apart from schooling.

The high-grade defectives, who are the only ones which come to the attention of the service, evidently need other methods of examination.

"There is little doubt that the best criterion of the adaptability of a candidate for enlistment would be a cross section of his career. However, when he presents himself he is governed by the desire to enter the service, and naturally it is not to be expected that much information will be obtained from him gratuitously which will assist in his exclusion. . . . Here, then, is where the necessity arises for some measure that will appraise him independently of his volition. . . ."

Another criticism that can be made of the Binet system is that it is standardized for children and depends in great measure upon education, so as applied to adults it is useful only as part of an examination. Both Goddard and Kuhlmann have asserted lack of faith in their own revisions of the tests for this class.

As they are essentially tests of the intelligence, they fail to reveal emotional deficiency, which is not evident in mental characteristics. The tests of Healy and Fernald, and the association tests, supply to an extent this lack.

Glueck states that a great deal of justifiable criticism of these tests has been directed against an attempt on the part of some of Binet's followers to supplant entirely the social definition of feeblemindedness by the artificial one made by the test.

Among military prisoners the moron is not found frequently—less than ten in 400 examinations. Epileptics are probably more numerous. Chronic alcoholism, frequently existing previous to enlistment, accounts for many offenders. Habitual drunkenness in psychopathic individuals causes much delinquency. They lack moral sense, judgment and stamina, and the ability to adapt.

It seems that the large majority of service patients in the Government Hospital for the Insane would have, at the time of their enlistment, survived the intelligence tests. Over fifty-six per cent are cases of dementia praecox, patients who are oftentimes especially bright school children with plenty of knowledge for passing the tests. Since April 1, 1914, careful examination of navy admissions has shown only three feebleminded patients and in only one of these was this the probable cause of admission.

Are we justified in taking twenty-five minutes of the medical officer's time to use a measure that detects only a small part of the undesirables?

To remedy in part these defects in the tests, Surgeon Sheehan suggests a period of probation at the training station for observation and further testing, a procedure which would enable examiners to become skilled in the work, and which would give opportunity for "more than one sitting, which is usually necessary except for testing the clearly feebleminded. It is said that the most serious objection to the time limit comes from the fact that it makes the whole test a stereotyped, rigid, mathematical procedure, which, in the last analysis, reduces the whole method to an absurdity.

"Another point not to be forgotten is the difficulty in devising tests suitable to our purpose, when we have to apply to what is really a cosmopolitan class a measure originally designed for use with a homogeneous people.

"To date it has not been found that any set of mental tests exists which is at all adequate to estimate the capabilities, and these are what we wish to estimate. The modification suggested by Dr. Schier seems to be a move in the right direction, and perhaps with standardization may be useful as a routine measure at the training stations. It should be applied to at least 500 sailors and marines, selecting those who by their actual acts have proven not only that they are intellectually capable, but that they are of sufficient emotional stability to adjust themselves to all conditions of service life. For our purpose, these would constitute normal men. Then compare the results of a similar examination of men who have shown by their actual acts that they are incapable of doing their duty or adapting themselves to these conditions. . . .

"It might be of value to consider requiring a candidate for enlistment to bring with him some evidence that would enable the recruiting officer to judge his history better. This would approximate what some foreign services obtain by their perfected statistics and records."

Sollier, Paul. War neuroses. Bulletin de l'Académie de médecine 73: 682–84, June 8, 1915

Sollier cites statistics from eight hospital centers which show that in about 16.2 per cent of 2,435 wounded soldiers there was evidence of a traumatic neurosis, that is, a total of 395 cases. Excluding those with neuropathic antecedents, only 250 cases are known of a neurosis developing under the stress of war.—J. A. M. A. 65:365, July 24, 1915.

Stier, Ewald. Progress in the Methods for the Care of the Insane in Time of War. Translated from the German by L. L. Smith for the Military Surgeon 30:332–35, March 1912

The first provision Dr. Stier mentions to be made for the care of the military insane in campaign is the securing of a sufficient quantity of quieting drugs, such as hyoscin, trional and veronal, to be carried on the march.

It is provided in the regulations that military surgeons under certain circumstances are required to maintain a special psychiatric service, and that the supply depots should be prepared to furnish these supplies at once. These are as follows:

12 tubs for continuous baths.
20 box or lattice beds.
20 pairs of shoes that cannot be torn.
80 suits made in one piece, not easily torn and buttoning in the back.

A considerable number of dry earth closets should be available, but precautions must be taken to prevent suicides therein, as these are often chosen by insane patients for this purpose.

The staff for the psychiatric department should be chosen as much as possible from sanitary officers and soldiers who have had some training or experience in the management and care of the insane.

"Arrangements for the procuring of railroad cars which are suitable for the transportation of the insane has, until the present time, not been especially provided for. The conversion of the ordinary cars of the hospital train into those especially suitable for this purpose could be arranged without much trouble. . . . The expeditious transportation of the military insane to their destination without changing cars is considerably facilitated by the provision of the regulations which requires that the number of places where the military insane are to be distributed should be especially designated by the line commanders, and that this list should be adhered to continuously throughout the trip. The line officers will then inform the Chief of the Field Sanitary and Transportation Departments of such arrangements." The personnel for the care of the insane during transportation should be as efficient and experienced as possible.

Stokes, C. F. Editorial [on **Mental Preparation in the Navy**]. U. S. naval med. bull. 7:417–19, July 1913

The slight but continued increase in the number of cases of mental disease in the navy is a subject for serious consideration from the standpoint of service efficiency, as well as from that of pecuniary loss to the government. The number of these cases stated to be not in line of duty indicates the general opinion of medical officers that in the large majority the disease, or the tendency thereto, exists prior to enlistment. The serious problem of detecting and excluding those of unstable mentality is thus presented to the medical examiner.

Under the most favorable conditions, allowing prolonged observation and repeated examination, the determination of underdeveloped or defective mentality in the borderline cases is exceedingly difficult. Familiarity with the conditions and influences to which a medical officer is subjected in recruiting makes it evident that with his narrow cross section of the man's life, consisting of observation for only a few minutes, he can not hope to detect mental obliquities that would show plainly in a longitudinal section covering a month or more.

For those classed as feebleminded various tests, notably the De Sanctis and the Binet-Simon, have been under investigation by psychologists and educators with the purpose of evolving a method by which the mental development of an individual can be determined. An article in this number of the *Bulletin* describes the Binet-Simon test and shows its applicability to service conditions in detecting the feebleminded applicant for enlistment. No value is claimed for this system in diagnosing mental conditions other than feeblemindedness, and even here are certain restrictions that greatly limit its practical usefulness.

Its general adoption, in the present state of its development, is therefore inadvisable, but it marks an advance in our methods and is worthy of further trial by medical officers on recruiting duty, who would do well to familiarize themselves with this method, that they may take advantage of its good features while bearing in mind its limitations.

In this connection it may be pointed out that what is coming to be known as "temperamental fitness" is attracting increasing attention, and certain lectures delivered at the Naval War College during the past year indicate that its important relation to the service is recognized. There are persons whose mental processes do not appear to be individually defective, and yet, when their intellectual activities are applied as a whole, they lack a certain co-ordination of directive force, which lessens their value or completely unfits them for a military career.

That mental equipment and training for the operations of war are at least as important as material preparation should be continually in the minds of all, and this subject deserves more study in order that methods may be developed and standards established whereby the temperamental types can be classified and those who are desirable can be distinguished from those who are temperamentally unsuited for military activities. This study must be applied equally to officers and men, and it is believed that its active prosecution would be well repaid by the results obtained.

Much can be learned by careful observation of the conduct of officers and men in grave emergencies. The results of such observations should be made matters of record and should be considered along with the temperamental characteristics before assignments to important or independent duty are made. The success of our arms at sea may depend largely upon the temperamental qualifications of the commander-in-chief. It is believed that no officer should be sent to sea who shows a positive Wassermann reaction, and especially should he be prevented from assuming high command. It is a matter of common observation to see cerebral syphilis develop unexpectedly under mental strain, inducing an unbalanced mind that would be likely to lead to disaster.

Thomas, G. E. Second Report on the Schier Test for Mentality, with Special Reference to the Point System. U. S. naval med. bull. 68–70, Jan. 1916

"Since my last report,* data covering the mental examination of 300 prisoners has accumulated. The results obtained in these examinations have been tabulated: first, according to the old system of marking; second, according to the point method suggested by Dr. Schier . . . and third with the view of comparing those found mentally deficient by either or both systems.

"According to the old system of marking, 70 per cent was taken as the passing mark and of 300 examined, 29.6 per cent failed. This result corresponds with my last report in which 28 per cent of 100 prisoners examined failed to pass the 70 per cent minimum.

"By the new point system in which a mark less than 50 per cent is considered indicative of definite mental deficiency, 19.5 per cent of the 300 cases failed."

Tables giving results by the old system and by the new point system, and a comparison of the two, follow. These show that class C of the cases examined by the Schier test—the class of average or doubtful—contains some mental defectives of the serious type.

"It is apparent that if a mental test is to be of any value a definite line must be drawn between the mentally desirable and undesirable, and although no test as yet designed can exactly fulfill this requirement it is believed that a line can be established that will exclude the greatest number of defectives and a minimum of normals. If by such an arbitrary standard we occasionally exclude material that will prove efficient and desirable, but by this same standard, we exclude the great majority of defectives, this weakness is excusable. . . ."

"I am strongly of the belief, based on the results of 500 examinations by the Schier system, that a 70 per cent minimum passing average is not too much to demand of the recruit. There is no doubt that a very small percentage—I do not think more than 3 per cent—of men who would be efficient and valuable to the service would be excluded by this arbitrary standard, but this sacrifice is small indeed when we exclude, which I believe we do, the great majority of the inefficient."

Thomas, G. E. Value of the Mental Test and its Relation to the Service. U. S. naval med. bull. 9: 200–11, April 1915. References

"For the last year and a half much work has been done at the Portsmouth naval prison with the Binet scale for the purpose of determining the mental standard of prisoners. When comparisons were made after several hundred tests had been completed, the idea of the value of this scale in its application to recruiting was advanced. There has been much discussion by psychologists outside the navy and by some of the medical officers in the service, of the value of the Binet system as a means to determine the mentality of the recruit. Kuhlmann has suggested it as being valuable in this relation. Acting Assistant Surgeon Schier has devised a test using some of the Binet procedures. Passed

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* See Thomas, G. E., Value of the Mental Test, etc.

Assistant Surgeon McMullin also has been experimenting with a simple system in connection with recruiting. If a mental test is to be applied in the navy, it should be devised for the recruiting officer and should answer the following requirements:

1. It should be fair in its requirements, and a definite minimum passing mark established.
2. It should be sufficiently varied to make evident intelligence, education and training.
3. It should be so devised that but slight, if any, variations are possible in the results of the different examiners.
4. It should not consume much time."

The author then describes results, with tables and illustrative cases, of applying the Binet-Simon and Schier tests, followed by a comparison of the two as to accuracy and relative value. "The results obtained by each system are fairly consistent. The most intelligent who passed the maximum 'Schier' also passed the maximum 'Binet,' and as the average is decreased on the Schier scale it also decreases on the Binet scale until seventy per cent is reached, when some discrepancies creep in." The chief disadvantage of the Binet test is that its results can vary quite widely according to the examiner. On the Binet scale the inaccuracy of the groups over the ten-year grade would make the establishment of a definite minimum, which at the same time is fair in its requirements, impossible.

The Schier test, on the other hand, allows little chance for variations, there being but one well-defined test with a definite minimum.

The Schier test, therefore, more closely fulfills all of the qualifications requisite for use in the navy. It is believed that it is fair and varied enough to determine intelligence, education and training; that its results by different examiners vary but little, if any; that it can be applied by any intelligent person after a little training; and that it consumes not too much time to make it objectionable.

Tombleson, J. Bennett. Series of Military Cases treated by Hypnotic Suggestion. Lancet, Lond., Oct. 21, 1916, p. 707–09

A paper giving in tabular form an account of sixty cases treated by hypnotic suggestion.

"It will be seen that the most successful cases are those of shock psychasthenia of all kinds, while cases of hyperthyroidism and neurasthenia also show very good results. The cases speak for themselves and confirm me in the opinion that practically all the cases of war neurasthenia and psychasthenia can be cured and sent back to work if treatment by hypnotic suggestion is used in reasonable time. Prejudice against this form of treatment does not, happily, exist in the minds of more than a very small proportion of the patients, and my experience has led me to think that it is only found in those whose keenness to return to the war areas is open to considerable doubt.

"So far as I have been able to trace them, the cure has been permanent in my cases, and if the same standard of criticism be applied to these cases and to similar cases treated in other ways, the utility of hypnotic suggestion will be obvious to any fair-minded critic."

U. S. Army. Report of Surgeon-General. 1912. p. 78

The admission rate for insanity for the United States was 1.68 per 1,000 as compared with 1.58 for 1910, 1.63 for 1909, 1.58 for 1908, and 1.79 for 1907. The noneffective rate was 0.46 per 1,000, as compared with 0.32 for 1910, 0.29 for 1909, and 0.31 for 1908.

U. S. Army. Report of Surgeon-General. 1913. p. 76

It is impracticable to compare the admission rate for this class of disturbance with the rate for diseases formerly classified and published under the term "insanity." The diseases included under the term "mental alienation," used in the present nomenclature which was put into use January 1, 1912, includes several conditions not included under the term insanity, such as defective mental development, constitutional psychopathic state, hypochondriasis, and nostalgia. The case admission rate for this class of diseases was 3.26 per 1,000 and the discharge rate was 2.78. [The admission rate for mental alienation was 3.56 for American troops in the Philippine Islands.—p. 106.]

U. S. Army. Report of Surgeon-General. 1914. p. 100

The admission rate for mental alienation was 4.83 for American troops in the Philippine Islands. In the United States the rate was 2.92. Last year the rates were 3.56 for American troops in the Philippine Islands, and 3.26 in the United States.

U. S. Army. Report of Surgeon-General. 1915. p. 95

The admission rate for mental alienation was 6.24 for American troops in the Philippine Islands. In the United States the rate was 3.83. Last year the rates were 4.83 for American troops in the Philippine Islands and 2.92 in the United States.

U. S. Army. Report of Surgeon-General. 1916. p. 75

The case admission rate for mental alienation (all) for 1915 was 3.04 per 1,000, and the discharge rate 2.54, as compared with 3.83 per 1,000 for the admission rate and 3.02 for discharge rate during the year 1914. The admission and discharge rates for the entire army for 1915 were 3.84 and 3.30 per 1,000, respectively.

U. S. Navy. Report of Surgeon-General. 1913. p. 9. Diseases of the Nervous System

Admissions under this class decreased from 1,015 to 809. Mental diseases occurred in about the same number as in 1911. Epilepsia showed an increase from 87 to 101.

The subject of mental diseases has received the close attention which is warranted by its important relation to service efficiency. Undoubtedly in the large majority of cases the disease or the tendency thereto exists prior to enlistment, and therefore the most important work in lessening its incidence must be done at the recruiting office by excluding the applicant whose defective mental equipment unfits him for the service.

Throughout the world an increasing interest in the subject of mental defectives is manifested, as a result of the realization of the fact that they are increasing much more rapidly than is the population as a whole. The feebleminded constitute the most dangerous element of any community, their defects are not remedied by association with normal individuals, and they are the enemies of law and efficiency. In the service they are frequently at conflict with military discipline and make up a large part of the malefactors; they are victims of mistreatment at the hands of others, and their unstable mental equilibrium is disturbed by small quantities of alcohol. The change of environment consequent upon entrance into military life alone may be sufficient to cause grave mental derangement in such persons.

Detection of the mentally unfit is often a vexing problem even under the most favorable conditions, and the difficulties are increased greatly by the circumstances under which the determination must be made in the recruiting office. Diagnosis of idiocy and low-grade imbecility is not a difficult matter, but the more dangerous high-grade imbecile, moron or moral imbecile, may be physically well developed, may appear mentally alert and bright, yet have latent immoral and criminal tendencies. The exclusion of these types requires most careful study of the applicant, and the great importance, from a military point of view, of the medical examiner's duties has been frequently emphasized. For the detection of those classed as feebleminded the Binet-Simon tests have been employed at one recruiting office, and the indications are that this method will prove to be of value within certain limits.

In this connection the study of late cases of syphilis in which there are no apparent symptoms is of the utmost value, not only in the navy but in civil life. It has been found that those so affected may, under strain of great responsibility, develop practically any type of mental aberration known to science.

U. S. Navy. Report of Surgeon-General. 1914. p. 8–9

During the year of 1913 there was a slight increase in the rate for mental diseases over the previous year. The following table will show the rate for mental disorders since 1910:

1910 rate for mental disorders	5.20
1911 rate for mental disorders	4.25
1912 rate for mental disorders	3.97
1913 rate for mental disorders	4.11

The rate per 1,000 of those invalided from the service for mental disorders during the year 1913 was larger for the Marine Corps than for the navy, the rate for the navy being 1.81 per 1,000 against a rate of 2.33 per 1,000 for the Marine Corps. About ten per cent of those admitted for mental diseases during the year were surveyed from the service within four months of the time of enlistment. A satisfactory method of detecting the mentally weak is receiving careful consideration by the Medical Department. A modification of the Binet-Simon method with suitable mental tests has been devised by Acting Asst. Surg. A. R. Schier, and his article has been published in the *Naval Medical Bulletin* and also has been published in the form of a reprint by the Marine Corps Publicity Bureau. At the same time careful mental examinations have been conducted by Passed Asst. Surg. G. E. Thomas at the naval prison, Portsmouth, N. H., using the Binet-Simon and other methods.

At the disciplinary barracks, Port Royal, S. C., examinations of this character have also been conducted by the medical officer and the material returned has been carefully studied. The subject has also received careful study by the medical officer stationed at the Government Hospital for the Insane with a view to devising, if possible, some mental test which would eliminate those liable to develop mental disorders or to become offenders against naval discipline.

The detection and exclusion of individuals of this class at the recruiting stations would not only greatly reduce the cost at the prisons and hospitals, but serve as an economic aid to other bureaus having to do with the personnel. This bureau is not satisfied that any of the intelligence tests used up to date are sufficiently exact to do any more than approximate the mental status of the individual under examination. It would appear that where the individual is examined by two or more examiners at different times different results are apt to be established, and while the results may not vary greatly, the difference is sufficient to show the unreliability of the test. Furthermore, the application of this test to 300 prisoners and to persons in the prison guard rated as good soldiers affords results which are disconcerting if we are to place any reliance upon the method. For instance, the results obtained from a group of three sergeants, four corporals, and three privates of the marine guard selected as above the average of efficiency show that the average mental age established was below that of the 300 prisoners under their care. In fact, the medical officer making the examination said that "if the Binet-Simon tests were applied to these men on enlistment and the maximum required, not one of them would have been taken into the service."

Furthermore, some of the prisoners whose records show them to be most undesirable in every way could pass a satisfactory examination by the Binet-Simon method, and would thus have been admitted to the service.

It therefore appears that the intelligence tests applied up to date are not satisfactory in determining the individual's degree of mentality, independent of other considerations.

The problem is one of considerable interest to the bureau because of its economic bearing on the service and the present lack of any satisfactory method of determining the mental status of the applicant for enlistment. Results which would justify a recommendation for the adoption of any system have not yet been accomplished; but the investigation will be continued until the advisability or inadvisability of adopting a mental examination before enlistment is determined.

U. S. Navy. Report of Surgeon-General. 1915. p. 13–14

The admissions for these disorders show no change from those of the preceding year.

1910 rate per 1,000 of personnel	5.20
1911 rate per 1,000 of personnel	4.25
1912 rate per 1,000 of personnel	3.97
1913 rate per 1,000 of personnel	4.11
1914 rate per 1,000 of personnel	4.11

The occurrence of cases of mental disease in the service is comparatively slight; among a personnel of 67,141, admissions were 276, the fireroom force leading with 52 (4.26 per 1,000), marines 50 (5 per 1,000), and apprentice seamen 32 (14.10 per 1,000). The prevention, detection, and care of the naval insane is not our main problem in connection with this subject. The mentally unfit betrays himself by his inability to successfully cope with service conditions that his comrades find usual and normal. As Passed Asst. Surg. H. E. Jenkins says, "such persons are unable to accustom themselves to their environment, which is frequently changing. They have very little regard for discipline, not realizing that such a thing is absolutely necessary for an efficient military organization. From their comrades they receive considerable ridicule and as a result are greatly depressed. . . . They are a continual source of annoyance to their superiors, can not be trusted in performing duties where any ordinary ability is to be used, and are absolutely misfits."

Undoubtedly some few of the 276 admissions entered the service entirely sound mentally, and from some stress or worry lost even their normal balance. But the great majority must have entered the service with this bias already actually or potentially established. This subject was discussed in my last annual report, and the hope was expressed that ultimately the subject would so crystallize that a practical and efficient working method could be devised to eliminate these undesirables on their first application for entry into the service. Interesting reports made to the bureau were published in the April, 1915, number of the United States *Naval Medical Bulletin*, from Drs. Sheehan, Thomas, Jenkins, and Schier. I am more inclined to believe that these hopes will be realized and that from observations already made, aided by further developments, a scientific classification according to mentality may be devised, which will be practical in its application, and economical in its time consumption, which will prevent the entry of the unfortunates into the service and incidentally eliminate the hitherto undetected defectives now in the ranks.

Such a procedure, the result of deliberation and tabulating of results by the navy's experts in collaboration with the many others in civil life now showing an active interest in the subject, could be officially adopted as a test to be used routinely should time allow, and if the pressure of work at recruiting stations at times was hampered thereby, could be more thoroughly carried out on receiving ships or at training stations.

Such tests can, however, never become exact measures, or accurate instruments of precision, and even if the most rigid adherence to directions is given, the equation of the varying examiners will influence results. But the sum total must be improvement. The service may lose good men, but many men will be kept out whose acceptance would be detrimental.

The standing of a naval career as a calling is constantly being elevated, and with such progress and its universal recognition the standard of those applying for enlistment constantly improves and their numbers increase. By an appropriate coincident elevation of the requirements the personnel will automatically keep pace in better moral, mental, and physical advancement.

Welch, W. H. Medical Problems of the War. Bull. of Johns Hopkins Hosp. 28: 154–58, April 1917

"The Maudsley Hospital is entirely for the reception of cases of so-called shell-shock. I don't think there is any group of cases so pathetic as these. I saw a ward with perhaps twenty-five soldiers, who were all victims of this terrible condition. They stand up when the physician makes his rounds. Most of them had continuous tremor with staring eyes, a look of terror, and blue, cold extremities. When examined they show various manifestations which we are not apt to attribute to hysteria. Some are deaf and dumb and some are dumb. The disorders of the special senses are most remarkable. The condition is described under various names, such as shell psychasthenia or shell neurasthenia, but it is commonly called shell-shock. So far as one can judge, they look on the whole to be rather inferior types both physically and mentally. I was told they were of the type that can not stand alcohol and were total abstainers in about 80 per cent of the cases. Two of the patients had never been wounded. There has been a good deal of discussion as to how many of the patients may be malingerers, and this has to be considered most carefully. There is no doubt an element of malingering in some of them, but it is impossible that the greater majority of them should be of this type. These conditions are tremendously interesting to the psychologist. I found Dr. Sherrington, of Oxford, devoting much attention to them. He called them disassociation of special senses. Meyer's view is that they are inhibitions from a tremendous disturbance of the consciousness of the personality of the individual, so that various nervous tracts are blocked for the time being. Some of the patients are treated by hypnotic suggestion with a good deal of success. Dr. Sherrington was telling me of a case in which the patient had been anesthetized and was cured by the anesthesia. Sometimes, when the patients go under the anesthetic, they regain their speech, and sometimes they begin to talk when they are coming out of it. Then they can continue to speak."

White, William A. Application of Psychiatry to Certain Military Problems. U. S. naval med. bull. 8: 1–16, Jan. 1914

A lecture giving suggestions as to the problem of "temperamental fitness of men in the naval service," and to assist in enabling the department to better adjust the individual to the specific things that will be demanded of him in time of war.

Dr. White takes up first the question of preventing enlistment of defectives as recruits. As these defectives are not easily recognized at time of enlistment, a three months' probationary period, which now precedes completing of enlistmenti n the army, was found desirable. He advocates giving all men with a history of repeated offenses a mental examination, as these offenses usually testify simply to mental deficiency and not to wilful misdemeanor.

"The greatest number of mental breakdowns come in the first enlistment, which of course means that as the enlisted man becomes better accustomed to service conditions and has shown in the first instance his ability to fit into the situation, he is more apt to be the man who will go along in the organization without further trouble.

"As at present constituted both branches of the military service have various tests along the line, various opportunities for advancement dependent upon study, good record, and again tests in the way of examinations, and at each one of these tests a certain number of men are eliminated, so that as we go up from the lowest in the ranks to the petty officers, warrant officers and the commissioned officers we have on the way the constant weeding-out process. . . .

"In the first place, such studies as have been made and such statistics, as we might expect, show a considerable increase in the number of mental disorders under actual war conditions. Not only this, but they indicate very distinctly that certain latent tendencies are brought to light by these stresses. We find, for example, an increase in the number of alcoholic psychoses, an increase in the number of psychoses due to syphilis of the nervous system, and an increase in the psychoses of metasyphilis, namely, paresis. . . . Certain recommendations stand out from this situation with a fair degree of clearness. In the first place . . . nobody to whom the term alcoholic could be properly applied should hold a position of commanding importance. . . . The same applies to the syphilitic. . . . "At the Russian Psychiatric Hospital at Harbin, during the Russo-Japanese War, the percentage of paresis among those brought back from the front was 5.6. . . . It seems evident that its development must have been hastened by war conditions, a conclusion which is borne out and re-enforced by the further fact that among the soldiers from the front who were under treatment there were evidences of syphilis in 20 per cent, while among other soldiers under treatment evidences of syphilis were only present in 1.6 per cent. . . . If either one of the conditions of alcoholism or syphilis is serious, then it goes without saying that their combination is doubly so."

Dr. White devotes the remainder of his article to a study of the "temperamental fitness" of the officer from a psychological point of view.

Wiltshire, H. Contribution to the Etiology of Shell-Shock. Lancet, Lond., June 17, 1916, p. 1207–12

Early in the war attention was drawn to the results of the use of powerful explosives upon the nervous system. These became manifest in a condition, which, for want of a better term, was called neurasthenia and later "shell-shock." The syndrome was so frequent that many believed it to be malingering or imitative, while others regarded it as hysterical. In any case, the subject is important. There is no doubt that the past history of the individual influences the character of the symptoms displayed. The physical traumata are also contributory and it is probable that there is somewhere a break in the chain of neurons governing the particular functions involved. It seems that the syndrome is most likely to occur when, to the effects of shock conditions, are added previous long continued anxiety and nervous exhaustion. This implies a certain cerebral instability. It is noteworthy that the mental confusion, inattention, fatigue and hallucinations are the symptoms heretofore ascribed to cortical injuries.

The writer concludes that the wounded are practically immune from shell-shock, presumably because a wound neutralizes the action of the psychic cause of shell-shock, that exposure and hardship do not predispose to shell-shock if troops are well fed.

While it is theoretically possible that physical concussion resulting from shell explosion might cause shell-shock, it is certain that this must be regarded as an extremely rare and unusual cause.

Chemical intoxication by gases generated in shell explosions can not be more than an exceptional cause of shell-shock.

Gradual psychic exhaustion from continued fear is an important predisposing cause of shell-shock, particularly in men of neuropathic predisposition. In such subjects it may suffice to cause shell-shock *per se*.

In the vast majority of cases of shell-shock the exciting cause is some special psychic shock. Horrible sights are the most frequent and potent factor in the production of this shock. Losses and fear of being buried are also important. Sounds are comparatively unimportant.

Consideration of the causes and frequency of relapses favors an original cause of a psychic nature. Any psychic shock or strain may cause a functional neurosis, provided it be of sufficient intensity relative to the nerve resistance of the individual.—R. Sheehan, U. S. Naval med. bull. 11: 242–43, April 1917.

Classification of War Neuroses

By Major A. F. Hurst, R.A.M.C.

(Guy's Hospital Gazette, London, March 24, 1917. Vol. XXXI. No. 749, p. 109)

A. PREDISPOSING CAUSES

(1) The congenitally nervous or "martial misfits" (2) A previous attack of neurasthenia	(3) A previous mental breakdown (4) Chronic alcoholism	(5) Concussion even years before

B. EXCITING CAUSES	Resulting Neuroses	Treatment
(1) Exhaustion due to: (a) Mental and physical strain (b) Toxaemia of acute and chronic infections (c) Insufficient food (d) Excessive heat (e) Pain and toxaemia of wounds	I. *Neurasthenia* (nervous, suprarenal and occasionally thyroid exhaustion)	Rest, followed by graduated exercise; sometimes adrenalin or thyroid
	II. Soldier's Heart	
(2) Emotion due to: (a) A single horrible incident (b) Prolonged and repeated horror, fear, etc. (c) Constant pain from a wound	III. *Psychasthenia* (amnesia; obsessions; phobias; tics; nightmares with secondary headache, insomnia and tremor	Suggestion with or without hypnosis
	IV. *Hysteria* (convulsions, tremors, paraplegia)	Persuasion, re-education, rarely hypnotic suggestion
	V. *Hyperthyroidism, hyperadrenalism* with harmonic form of "Soldier's Heart."	Rest, opium, belladonna
	VI. *Exaggerated Defensive Reflexes* (especially "auditory jump" and "visual flinch" reflexes)	Quiet and isolation
(3) Explosion of high power shells (a) Concussion i. Aerial ii. Contact (burial, sand bags, etc.) (b) CO poisoning	VII. *Shell-shock:* an organic basis (concussion symptoms) often with superadded hysteria (paralysis, deafness, mutism, blindness, etc.)	Rest for organic basis; persuasion and re-education, rarely hypnotic suggestion, for hysteria

C. CONDITIONS PREDISPOSING TO THE DEVELOPMENT OF SPECIAL SYMPTOMS	Resulting neuroses	Treatment
(1) Family or personal history of Epilepsy	VIII. *Epilepsy*	Bromide
(2) Mental deficiency (3) Mental disease	IX. *Insanity*	
(4) Syphilis	X. *Cerebral syphilis:* Tabes: General Paresis	Hg.: K. I.: Salvarsan
(5) Ocular defects, already present or produced simultaneously	*Asthenopia* and headaches *Hysterical blindness*	Glasses Hypnotic suggestion
(6) Aural defects, already present or produced simultaneously	*Hysterical* deafness; tinnitus	Hypnotic suggestion
(7) Previous or simultaneous injury of a limb	*Hysterical* paralysis, spasm or tremor of the limb	Persuasion and re-education
(8) Previous speech defect (stammering, aphonia, mutism)	*Hysterical* mutism, aphonia, stammering	
(9) Excessive smoking	*Tremor;* "Soldier's Heart"	
(10) Passed emotional disturbances or illnesses, which may since have been forgotten; these may influence III, IV, VI, and VIII		

Burton-Fanning, F. W. Neurasthenia in Soldiers of the Home Forces. Lancet, Lond., June 16, 1917, p. 907–11. Report of the Medical Research Committee

"This communication is entirely based on experience gained at the First Eastern General Hospital, Cambridge, where I was serving prior to going overseas with my present unit. Its object is to draw attention to the predominance of neurasthenia as a cause of going sick amongst our newly recruited soldiers. I use the term in its widest sense to include disorders of the nervous system which are believed to have no organic basis. . . . During the last ten months I have had charge of a number of medical beds in the First Eastern General Hospital which had carried from time to time between 120 and 180. Into these beds 2,240 patients have been admitted in the ten months, of whom 640 came in convoys from overseas and the remaining 1,600 were from Home Forces. Out of this last number 509 were thought by me to be suffering from neurasthenia and to be free from any organic disease. It would appear, therefore, that, speaking from an experience of ten months in a Territorial Force Base Hospital, nearly one-third of the admissions into medical wards from Home Forces are for neurasthenia. . . . This communication only deals with soldiers of the Home Forces, but I should like to allude to the fact that neurasthenia forms a part or the whole of the disability of an astonishing number of men invalided from overseas."

Burton-Fanning then gives a picture of the neurasthenic soldier, tracing his troubles from the uncurbed nervous temperament and habits of boyhood through the strange and uncongenial, and sometimes terrifying, experiences of wartime to the final breakdown.

Symptoms and signs of the neurasthenic are then discussed. Special stress is laid upon the fact that symptoms in such cases are never limited to one region or organ, but are of widespread distribution. This should be the first point made in diagnosis.

Patients' chief complaints and the diagnosis with which they came to the hospital are next taken up in the order of frequency as follows: so-called "rheumatism," or "neuritis," or "gastritis"; pain in the heart, inability to draw a deep breath, proneness to giddiness or actual fainting, probably caused by a panicky emotional state; "lung disease," and bladder trouble. The writer states that, in his experience with war neuroses, he has found throat affections and those of the sexual organs rare.

Prevention is next discussed, and emphasis laid upon correct diagnosis by the physician so as to disabuse the patient's mind of any idea of organic trouble. The writer thinks that in general the prevention of neurasthenia comes within the sphere of education. All classes are affected, but few of his patients, he finds, have had a public school education, and so have not had the benefit of that "atmosphere in which character and manliness are developed side by side with learning, and which seems to prevent neurasthenia."

Treatment and prognosis are briefly discussed. "Treatment seems to resolve itself into an attempt to remove from the mind whatever is the disturbing influence. The doctor's first task, therefore, is to gain the patient's confidence and discover the nature of his troubles." For this, patience and experience in cases of this kind are necessary. Occupation for neurasthenic patients is usually better than rest as a form of treatment. As a rule it is better to return the neurasthenic to work at home or behind the lines where he can be of real value. He can rarely make of himself a real soldier.

Eder, M. D. War-Shock; the Psychoneuroses in War; Psychology and Treatment. Lond., Heinemann, 1917. 154 p.

This book is based upon a study of a hundred consecutive cases (psychoses excluded) which came under the author's observation while he was in charge of the psychoneurological department at Malta. The larger number were admitted directly to the special department of which he was in charge. The following are the author's "conclusions":

(Chapter 8, p. 144–45)

(1) War-shock is hysteria occurring in a person free from hereditary or personal psychoneurotic antecedents, but with a mind more responsive to psychical stimulus than the normal.

(2) The wrenching from the customary calling and life, the new discipline, the peculiar and terrible mental strain of modern war-conditions acting upon this sensitive mind determine the disease among soldiers.

(3) In 100 consecutive cases of psychoneurosis 70 per cent correspond to this description; 30 per cent have neuropathic antecedents, hereditary or personal; the latter correspond more closely with the psychoneuroses seen in civil life.

(4) Shell-shock, gas-poisoning, or other physical injuries do not cause the disease. The symptoms are protean—palsies, analgesia, amblyopia, mutism, deafness, affections of the vegetative system such as the soldier's heart, vomiting, diarrhoea, insomnia, loss of memory, somnambulism, phobias and obsessions of all kinds.

(5) These symptoms are the result of mental conflicts or other mental phenomena; all the symptoms can be understood in terms of the mind without any reference to physiopathology.

(6) The psychopathology of war-shock is that of the psychoneuroses, and the mechanisms those discovered by Freud in hysteria.

(7) War-shock is not a new disease; it is a variety of hysteria where the one factor (the psychic trauma) is overwhelmingly large in relation to the second factor (predisposition); it is separated from non-war-shock cases in degree, not in essence.

(8) The treatment par excellence is hypnotic suggestion, the suggestion by preference being directed to the complex as determined from the psychological examination and general psychoanalytic conclusions.

(9) 91.5 per cent of cases of war-shock were cured by this method and 8.5 per cent improved. Of soldiers with previous neuropathic antecedents, who were cured, 27.6 per cent improve and 10.4 per cent are unaffected. Cure is very rapidly effected; most cases are well in less than two weeks, some in a few minutes or hours.

(10) The usual objections to hypnotic suggestion do not apply to war-shock by reason of the absence of neuropathic antecedents.

(11) All methods of treatment, other than psychoanalysis, are based on suggestion, including "spontaneous recovery," persuasion, reasoning, symptomatic treatment, electrotherapy, etc. The objection to these indirect forms of suggestion is that they are less effective (more uncertain and less rapid) than suggestion under hypnosis.

(12) The earlier the patients are treated by this method the better.

(13) The majority of war-shock patients so cured can return to the front in three to six months.

(14) Cases of "functional" disease should not be discharged from the army until cured.

Hotchkis, R. D. Renfrew District Asylum as a War Hospital* for Mental Invalids; Some Contrasts in Administration; with an Analysis of Cases Admitted During the First Year. J. of mental science, Lond., 63: 238–43, April 1917

Following is the first part of Dr. Hotchkis's paper; the second part deals with a clinical analysis of the cases treated:

"The first intimation, in the form of a request to the District Board made through the General Board of Control for Scotland, that Dykebar was wanted as a war hospital for mental diseases, was given in November, 1915, and after this request had been unanimously agreed to by the District Board, certain financial questions had to be settled, the details of which I need not enter into. . . .

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* Dykebar War Hospital, Paisley, N. B.

"At the same time there had to be carried through the transfer of the parochial patients to other institutions, which involved a considerable amount of work, both to the General Board of Control and to the staff here, and also, I am afraid, to some of my audience to whom they had to be sent. The more serious cases were transferred to the nearest asylums, namely, Hawkhead and Riccartsbar, and the new cases from the county are being sent either to Smithson or Riccartsbar, which was the arrangement before Dykebar was built. By the end of the first week in January, 1916, all the patients had been cleared out, with the exception of twenty-five men who were retained for farm and other outside work, and who are accommodated in the reception block, which is a small building quite separate from the others. The two classes of patients are thus kept separate, though as a matter of fact in outside work the two often fraternize, but the soldier always assumes command. The transfer of the patients was carried out without a hitch, due to the excellent work of the Transport Section of the Red Cross Society, and to the providing by the military authorities of an ambulance train when parties of about one hundred had to be transferred. . . .

"I will now describe shortly the increase and organization of the staff in the different departments to meet the new conditions.

"*Kitchen.* Instead of one cook and one kitchenmaid, a superintendent and assistant superintendent and six kitchenmaids were engaged. We were fortunate in securing as superintendent a lady with first-class qualifications and previous experience in a military hospital. As the patients are encouraged to work in every department, there are, as a rule, about six working regularly in the kitchen. Owing to the fact that the military scale of diet is more generous than under ordinary circumstances, some additions had to be made to the cooking apparatus of the kitchen.

"*Laundry.* The laundry had just been enlarged, so no difficulty has been experienced. Owing to the extra work, seven extra laundrymaids were engaged to replace the female patients, and in addition there are as a rule about nine or ten soldier patients who work there.

"*Store.* There is not much change, except that certain articles of food, as meat, bread, and flour are sent from the Army Stores Department at Greenock, the other provisions being obtained under contract as formerly. The ordinary books required by the General Board of Control have still to be kept, but the method of ordering stores, sending back empties, etc., has to be according to army regulations. The accounts are paid by the Finance Committee of the District Board, who, to meet expenditure, have to send a requisition to the Command Paymaster each month for what is necessary. The accounts have to be approved of by the General Board of Control.

"*Pack store.* The pack store is a most important part of a military hospital. On admission the clothes of the patients are all cleaned if necessary, mended, and carefully put away, any deficiencies being made up from the pack store, as everything that a soldier requires in the way of clothing has to be kept there—for example, the hospital clothing, service clothing, and civilian clothing for discharged soldiers—and in the inventory a complete history of every article has to be kept with scrupulous exactness. Rigid rules and forms hedge in all that has to do with army clothing, and the disappearance in transit or otherwise of any garment or accessory is the prelude to an endless correspondence. In this hospital the gallery of the ordinary store is used as the pack store, and in addition three or four hundred racks were put up in the tailor's shop for the patients' clothing on admission.

"*Office.* This corresponds to a regimental orderly room. Under former conditions one clerkess did the work comfortably; now it takes the full time of four, and they sometimes have to work late and on Sundays. Army forms and methods are very complicated, and they give one an idea of the vastness of the organization controlled by the War Office. When I first had to study them, I felt like going back to school without the elasticity of youth.

"*Nursing staff*. The matron, as has always been the case in this institution, is over the whole of the nursing staff, both orderlies and nurses. The kitchen and laundry departments are also under her. There was no head attendant to be made sergeant-major, and though it was prophesied that a sergeant-major for purposes of discipline amongst the orderlies was a necessity, the present system works admirably. There are three assistant matrons, two on day and one on night duty.

"The orderlies are composed of three classes according to their engagement:

"(1) The former attendants, eleven in number, all of whom have been enlisted in the R. A. M. C., the charge attendants having been made sergeants and the second charges corporals.

"(2) Orderlies, twelve in number, engaged by me on behalf of the District Board for the duration of the war and paid by that body. They also are enlisted into the R. A. M. C., and are mostly men over military age or unfit for active service, and among them are some experienced asylum attendants. They do not contribute to the Superannuation Act, and they could be added to at any time if suitable candidates present themselves.

"(3) Regular R. A. M. C. men, two sergeants, two corporals, two lance-corporals, and twenty-one privates, who were sent from various units, and who could be recalled at any moment. They have the ordinary army pay and allowances and also get 6d. per day extra as mental attendants if found satisfactory.

"As regards female nurses, of whom there are twenty-one, the difficulty at first was to know how many wards could be staffed entirely by them. The present arrangement is that the East hospital, which is divided into two adjoining wards with a total of forty-nine beds, has been put in charge of nurses both by night and day, though an orderly is always there during the day for bathing and shaving the patients, etc. There are a certain number of cases requiring treatment in bed in this ward, and the cases include most varieties of mental disease, many of them being in a convalescent stage, but still requiring a certain amount of observation.

"One of the villas consisting of seventy-five beds is also under nurses, and the cases there are patients not yet ready to be discharged, but who can be allowed a certain amount of liberty. I am quite satisfied with the work done by the nurses in these two buildings.

"At the beginning, in addition to the two mentioned, another villa was staffed by nurses, but the patients sent there were more difficult to manage and it did not work so well. Ultimately the charge nurse married one of the patients on his discharge, and as discipline was somewhat relaxed the villa was placed under orderlies. There are no nurses in the north wing of the west hospital as most of the very acute cases are there, but there are two nurses in the south wing. One of the villas is also without nurses, but all the others have either one or two, and their duties are chiefly connected with the kitchen and dining-hall, and they take entire charge of the food. In doing this they have the assistance of several patients for whom they are responsible. The night staff consists of one assistant matron who is responsible for every part of the institution, three nurses, one charge orderly with the rank of sergeant, and ten orderlies.

"*Medical staff*. My duties as superintendent remain as before except that the clerical work is far more than in a civil mental hospital.

"There was some difficulty at first in obtaining a medical staff, but, thanks to the exertions of Dr. John Macpherson, one of the Commissioners, the services were secured of Dr., now Capt. Buchanan, the Medical Superintendent of Kirklands Asylum. There are also on the staff Capt. A. Ninian Bruce, Lecturer on Neurology at the University of Edinburgh, and Dr. Dawson, Medical Superintendent of Ponoka Asylum, Alberta, Canada. The Pathological Department is in charge of Capt. Bannerman."

Hotchkis, R. D. Renfrew District Asylum as a War Hospital for Mental Invalids; Some Contrasts in Administration; with an Analysis of Cases Admitted During the First Year. J. of mental science, Lond., 63:243–49, April 1917

The first part of Dr. Hotchkis's paper deals with administrative matters and is abstracted elsewhere (q.v.). The second part presents a clinical analysis of the 942 cases admitted from January 24, 1916 to January 31, 1917. Of these 111 were sent from the expeditionary force. Dr. Hotchkis confines his observations to the expeditionary cases, among which were five German prisoners of war.

The following were the diagnoses made:

		No.	*Per cent*
Manic-depressive		188	21
Manic type	31		
Depressive type	133		
Stupor	7		
Mixed type	17		
Alcoholic		152	18
Mental deficiency		151	18
Confusional		134	16
Dementia praecox		118	14
Catatonic form	11		
Paranoid form	14		
Simple form	93		
Paranoia		44	5
General paralysis		22	2
Other organic brain conditions		5	Less than 1
Epilepsy		7	" " 1
Secondary dementia		7	" " 1
Not insane		4	" " 1

The author makes exceedingly interesting comments on the cases of each type. Most of the alcoholics were delirium tremens, contracted while home from the front on leave. Some others were old alcoholics, who broke down as soon as their supply was cut down in the army. Others did well until exposed to shell fire. Of 45 soldiers admitted who had cut their throats, 18 were alcoholics. The defectives were divided into classes, the "vicious" and the non-delinquents. Of the 37 "vicious" nearly all were habitual criminals and were usually sent from other hospitals, where they had been giving trouble. Of the rest nearly all had been able to earn a living in civil life in some simple calling. In several cases they were regarded as more dangerous to their comrades than to the foe, on account of not understanding the mechanism of their rifles. Some of them were not permitted, on this account, to load their rifles in the trenches. One, while on sentry duty, was asked by an officer what he would do if the enemy appeared. He precipitated his military downfall by answering, "Pass, friend; all is well." Many of the defectives had confused episodes, which soon cleared up.

Many of the paranoiacs had been insane before enlistment. They were found among the older soldiers (35 to 40). The writer does not feel that the data on the 22 cases of general paralysis justify an opinion on the part played by military service in bringing on the disease in the syphilitic.

With one exception (a traumatic case), all the epileptics had had the disease before enlistment. The author regrets that the inelastic classification of the army did not permit him to classify the mentally unstable. He uses the term extensively, however, when cases are discharged from the army.

The following table shows the disposition of 500 cases discharged:

	Total	*No.*	*Per cent*
Total cases discharged	500		
Sent to asylums		139	27
Returned to duty		155	31
Discharged as recovered		40	8
Sent to their friends		111	22
Died		11	2
Escaped		2	

NOTES AND COMMENTS

LEGISLATION

Arizona

A child welfare act has been passed providing for the establishment of a child welfare board in each city of Arizona.

Bill to establish a school for the feebleminded failed to pass.

Bill to enlarge the State Asylum for the Insane by having an insane criminal ward at the State Prison passed the Senate but died in the House at the end of the session.

California

Legislature of 1917 has appropriated $10,000 for the construction of a tubercular hospital at the Stockton State Hospital.

$30,000 has been appropriated for the construction and equipment of a cottage for female patients at the Agnews State Hospital.

$45,000 for the construction of a cottage for disturbed patients at the Stockton State Hospital.

$45,000 for the construction of a workers' cottage for men at the Agnews State Hospital.

$45,000 for construction and furnishing of a cottage for disturbed patients at the Southern California State Hospital.

$10,000 for the construction and furnishing of a superintendent's cottage at the Norwalk State Hospital.

$36,700 for construction of farm buildings at the Norwalk State Hospital.

$50,000 for the construction of an administration building at the Norwalk State Hospital.

$135,000 for the construction of three cottages for patients at the Norwalk State Hospital.

$15,000 for the building of a nurses' home and an industrial building at the Southern California State Hospital.

$58,000 for the construction and equipment of two cottages at the Napa State Hospital.

$54,750 for new construction at the Sonoma State Home, of which $15,000 is for a cottage for low-grade adult females.

Chapter 184 of the laws of 1917 provides for the transfer of inmates between state hospitals, and to and from the State Home for Feebleminded and the state hospitals.

Chapter 223 of the laws of 1917 authorizes the Board of Trustees of the Whittier State School to maintain a department of clinical diagnosis.

This department will make examinations not only of inmates of the Whittier School but of patients in any other institution when requested. The department is also instructed to inquire into the causes and consequences of delinquency and mental deficiency, and related problems.

A bill introduced during the 1917 session to establish a psychopathic hospital in San Francisco failed of passage.

The Stockton State Hospital has received an appropriation of $60,000 for the purchase of 483 acres of land to be used for farming purposes.

Chapter 776 creates a second institution for the feebleminded to be located in Southern California and to be known as the Pacific Colony. This act defines a feebleminded person as one who is incapable of managing himself or his affairs independently, or of being taught to do so, and who requires supervision for his own welfare or the welfare of others; or one whose intelligence will not develop beyond the level of the average child of twelve years. It provides for the detention and examination of a child brought before the juvenile court if he appears to be feebleminded. The superintendent may admit temporarily for purposes of observation persons suspected of being feebleminded. In case there are vacancies at the Colony the board of trustees may admit, without judicial commitment, epileptics of any age. The Colony is to have a department for clinical diagnosis, classification and observation of inmates. The board of trustees may discharge, or the superintendent may grant a temporary leave of absence to any inmate at any time. Before an inmate who has been committed to the Pacific Colony is discharged, he may be sterilized, if he is feebleminded or afflicted with incurable chronic mania or dementia. This act carries an appropriation of $250,000.

Colorado

A bill was passed changing the name of the Colorado State Insane Asylum to the Colorado State Hospital.

The State Home and Training School for Mental Defectives, at Ridge, has received an appropriation of $35,000 for the construction and equipment of four cottages.

Connecticut

A bill has been passed providing for the transfer of insane, feebleminded, or epileptic persons by order of the court making the original commitment, on the written application of the superintendent from whose institution the transfer is to be made, this institution to pay the cost of the order and transfer.

Provides for emergency admissions for insane, for a period of ten days, to a private or public institution for the insane without the order of any court, upon a certificate by a reputable physician. If further treatment is required, the person in charge of the institution shall cause commitment proceedings to be begun at once.

Provides for voluntary admission upon the written request of the patient.

The legislature has authorized the establishment of a state reformatory for women.

Bill to consolidate Connecticut Colony for Epileptics and the Connecticut Training School for Feebleminded into one institution to be called the Mansfield State Hospital passed.

Delaware

The state Commission for the Feebleminded, appointed recently by Governor Townsend, is looking for a suitable location for the school for the feebleminded which has been authorized by the legislature. A site of at least a thousand acres is desired.

District of Columbia

Congressman Tinkham of Massachusetts has introduced a bill (H. R. 1768) providing for the feebleminded in the District of Columbia as follows:

To establish a school and home for feebleminded persons of the District of Columbia, to be known as the Columbia Training School; said school to be under supervision of the Commissioners of the District of Columbia.

Authorizes the Commissioners to purchase land not to exceed 1,500 acres situated in Maryland or Virginia.

Appropriates $500,000 for the land and buildings.

Commissioners to appoint seven citizens of the District of Columbia as a board of control.

At least one of this board is to be a physician with special experience in mental diseases and mental deficiency.

Provides for the commitment of feebleminded persons of not less than six years of age, after a petition has been filed with the clerk of the Supreme Court, setting forth the facts, and after a hearing before the court.

Pending the hearing of the petition, an alleged feebleminded person shall not be detained in any place provided for detention of persons charged with, or convicted of, criminal or quasi-criminal offense.

The hearing shall be by the court and two physicians, or one physician and a psychologist, to be appointed by the court, who are residents of the District of Columbia.

The guiding and controlling thought of the court throughout the proceedings is to be the welfare of the person and the welfare of the community.

If the person is adjudged to be feebleminded, court may appoint a guardian, or direct that he be sent to a private institution, or be placed in the school and home which this act provides.

Provides for discharge, and transfers to Government Hospital for Insane.

Provides for penalty for any one who contrives to have any person adjudged feebleminded unlawfully, and for any violation of this act.

Provides for examination of a child brought before the juvenile court to see if he is feebleminded and that he be detained in a place of safety pending the hearing.

That the buildings shall be on the cottage plan.

That in addition to such persons as may be committed to this institution by the Supreme Court, feebleminded persons and epileptics between the ages of six and twenty-one years may be admitted upon application of parents or guardians, provided parents or guardians guarantee expenses, and also if the person is feebleminded or epileptic in the opinion of the superintendent of the institution.

Owing to an agreement that only war measures should be considered in the extra session of Congress, this bill will receive no attention until next December, when it will be pressed for favorable consideration.

Florida

A bill before the legislature to establish a second hospital for the insane in southern Florida was defeated by one vote.

A resolution has been introduced in the House calling for a committee of three citizens to be appointed by the governor, to investigate and report to the next legislature regarding the location and erection of a new hospital for the insane.

Illinois

Illinois is the first state in the Union to create by law the position of state criminologist.

The Civil Administrative Code divides the civil administration of the state government into nine departments, as follows: The department of finance, the department of agriculture, the department of labor, the department of mines and minerals, the department of public works and buildings, the department of public welfare, the department of public health, the department of trade and commerce, and the department of registration and education.

The department of public welfare has the following officers: Director, assistant director, alienist, criminologist, fiscal supervisor, superintendent of charities, superintendent of prisons, and superintendent of pardons and paroles.

Indiana

Chapter 56 of the acts of 1917 authorizes the deportation of a non-resident insane, feebleminded, epileptic, or poor person to the state or country of his legal residence, or to the state or country from which he came to Indiana.

A bill introduced in the 1917 session which authorized the voluntary admission of patients to the state hospitals for the insane failed to pass.

A law has been passed providing that the state be reimbursed for the maintenance of an inmate at the Village for Epileptics, at the School for Feebleminded Youth, at the hospitals for the insane, or any other state institutions when such inmate has an estate not needed for the support of near relatives. This amount is not to exceed four dollars per week and is to be collected quarterly.

A committee composed of a member of the board of trustees of each state institution has been provided which is to arrange for the joint purchasing of supplies for the state institutions "whenever such purchasing shall seem advisable."

A bill providing for the mental and physical examination of school children passed the House but failed in the Senate.

A state-wide prohibition act was passed in the 1917 session of the Indiana legislature. This law becomes operative on April 2, 1918.

The Eastern Hospital for the Insane has received an appropriation of $25,000 for colony extension and improvement, and $33,000 for a cottage for women.

The School for Feebleminded Youth, at Fort Wayne, has received $12,700 for colony farm, heating plant and equipment.

The Indiana Village for Epileptics has received an appropriation of over $200,000 for new construction. This will provide for 2 cottages, each for 20 females; 4 cottages, each for 35 females; and 2 cottages, each for 29 males.

Bills aiming to control venereal diseases, to require health certificates for marriage, and to prohibit the sale of habit-forming drugs failed.

Iowa

Bill to establish a state psychopathic hospital to be located at Iowa City and to be connected with the College of Medicine of the State University of Iowa failed.

The State Hospital and Colony for Epileptics will receive $105,000 for the construction and equipment of additional cottages, $20,000 for a cottage for tuberculous inmates, and $75,000 for two dining halls and kitchens.

[illegible]

[illegible]

[illegible]

Kansas

A state board of administration has been created composed of three members with the governor an ex-officio member. The board is to appoint a business manager to have charge of all state educational, charitable and correctional institutions.

The Larned State Hospital has received an appropriation of $35,000 for the construction and equipment of a cottage, $5,000 for a residence for the superintendent and [illegible] for a kitchen and equipment.

Maine

A law has been passed requiring that cases of venereal disease occurring among inmates of state, county, or municipal, charitable and correctional institutions be reported to the State Board of Health. The board is authorized to provide laboratory facilities for free diagnosis and to furnish treatment at cost.

Chapter 40 of the laws of 1917 amending Section 2 of Chapter 64 of the Revised Statutes of Maine, inserts the word "feebleminded" after the word "insane" so that the section reads, "No insane or feebleminded person or idiot is capable of contracting marriage."

Chapter 88 of the laws of 1917 provides for the transfer of inmates of the reformatory for women to either of the state hospitals for the insane or to the institution for feebleminded, in case they are adjudged to be insane or feebleminded.

A law has been passed extending the period of parole of patients from the state hospitals from six months to an additional six months upon application.

Chapter 180 of the laws of 1917 amending the commitment of the insane provides for the reception and temporary detention of a person who has been examined by municipal officers pending the issue of a certificate by them stating his insanity, residence, etc. If the person is alleged to be insane, the superintendent may receive him without the certificate, provided he receives a copy of the complaint and the physician's certificate.

Massachusetts

Chapter 48 of the laws of 1917 extends the period of parole from six months to a year of inmates of institutions over which the Massachusetts Commission on Mental Diseases has supervision. This applies to the insane, feebleminded, epileptic, inebriate and drug addicts in public and private institutions.

Chapter 223 of the laws of 1917 provides that a person admitted to the Massachusetts School for the Feebleminded and the state school at Wrentham for observation upon the written request of his natural or legal guardian, shall not be detained longer than thirty days to determine if he is feebleminded.

Chapter 232 of the laws of 1917 extends temporary care without commitment to persons addicted to the intemperate use of narcotics or stimulants. Hospitals are permitted to admit such persons for a period not exceeding fifteen days for treatment on the application of a physician, a member of the board of health, or a police officer of a city or town, by an agent of the institutions registration department of the city of Boston, by a member of the district police, or by a wife, husband, guardian or in case of an unmarried person having no guardian by the next of kin. At the end of fifteen days the patient must sign a request to remain, must be committed or must be discharged.

The Committee on Public Institutions referred to the next legislature the resolve for building and equipping cottages at the Sherborn Reformatory to provide for the study of psychopathic women.

The bill to authorize the sale of the Northampton State Hospital failed to pass.

Chapter 115 of the laws of 1917 authorizes the Massachusetts Commission on Mental Diseases to "develop, extend and complete a state-wide system of psychopathic hospital service by establishing new hospital and out-patient units in connection with existing and future state hospitals under the supervision of said commission."

Minnesota

The legislature has appropriated $65,000 to the School for Feebleminded for a custodial cottage for girls.

Voluntary admission of patients suffering from mental disease is provided for in a bill passed by the 1917 legislature.

The state farm for inebriates at Willmar has by legislative enactment been changed to a hospital for the insane.

A bill has been passed giving the Board of Control powers of local guardianship over children committed to its care. A Bureau of Child Welfare has been created in the Board of Control, and local boards of child welfare are authorized in various counties.

Missouri

A section of the State Prison Board Act which establishes a state prison board of three members, provides that no persons who are idiotic or insane shall be committed to the Missouri Reformatory or be received by the superintendent of this institution.

An item which would appropriate $55,000 for the construction and equipment of a custodial building at the Missouri Colony for the Feebleminded and Epileptics, was vetoed by the Governor.

Montana

The legislature of Montana has passed an act appropriating $2,000 to be expended by the Board of Education for the purpose of investigating the condition of the feebleminded, deaf and dumb.

A law has been passed creating a division of child welfare under supervision of the State Board of Health.

Nebraska

A prohibition amendment to the constitution of the State of Nebraska, adopted at the general election held in November, 1916, became operative May 1.

The following appropriations for the hospitals for the insane in Nebraska are worthy of mention: $143,000 for new construction and improvements for the hospital at Lincoln, $117,000 for new construction and improvements for the one at Norfolk, $12,000 for additional lands for agricultural purposes at this institution, and $25,000 for improvements for the hospital at Ingleside.

The Institution for Feebleminded Youth, at Beatrice, has received an appropriation of $63,000 for a new cottage for girls, an addition to the hospital building, and the construction of a new well and improvements and equipments for the power house.

New Hampshire

The Board of Control of Public Institutions has just been reorganized. The Board will hereafter consist of five instead of ten members. The governor becomes an ex-officio member.

The institution for the feebleminded at Laconia has received an appropriation of $58,000 from the legislature which is to be used in the construction of a dormitory for feebleminded women of child-bearing age.

A sterilization law has been passed making sterilization permissible by any surgeon with the consent of the person, his guardian, or relatives.

A bill authorizing the voluntary admission of patients to the state hospital has been passed.

Chapter 56 (1917) provides that the board of trustees of state institutions may transfer to the state hospital, temporarily and for purposes of observation, any prisoner who has been committed to the state prison, who may be suspected of insanity.

Chapter 103 (1917) provides that institutions receiving persons of unsound mind, or for the treatment of specific diseases, must secure a license from the state board of health.

Chapter 112 (1917) creates a board of trustees of state institutions for the management of the state hospital, the school for feebleminded, the industrial school, the state sanatorium for consumptives, and the state prison. The board is to consist of the governor and four others, appointed by him, with advice and consent of his council.

Chapter 141 (1917) provides that the New Hampshire School for Feebleminded Children may retain inmates after the age of 21 years if it seems to be for the best interests of the community.

New Jersey

The legislature has passed a bill which requires reporting to the State Department of Health all cases of venereal disease, and authorizing the department to establish quarantine measures if necessary. A second bill makes it a misdemeanor for any one infected with venereal disease to marry.

A law has been passed providing that there are to be at least two women members on the board of managers of the state hospitals for the insane in addition to the present members.

A law has been enacted creating a commission of five to investigate conditions in the state charitable institutions, to inquire into the best methods of centralizing control, the question of the transfer of inmates and other improvements.

Chapter 34 of the laws of 1917 provides $5,000 for physical and mental examination of all prisoners who are now confined in the New Jersey State Prison at Trenton and for a classification based on the result of these examinations.

New York

Chapter 503 of the laws of 1917 requires that each party when applying for a marriage license must sign a statement that to his or her knowledge he or she has not been infected with any venereal disease, or if so infected within five years that he or she has had a laboratory test within that period showing that he or she is free from such disease.

The Sage Bill, creating a Hospital Development Commission, has been signed by the Governor. This commission will consist of the State Engineer, Chairman of the State Hospital Commission, State Architect, Chairman of the Senate Finance Committee, Chairman of the Assembly Ways and Means Committee, one member of the legislature who shall also be a minority member of one of the financial committees of the legislature, and two members to be appointed by the Governor. The commission is to examine each site of hospital development in the state now owned by the state or which may be later developed; to investigate the capacity of the present state hospital buildings; to consider the future policy of the state in regard to the care of its insane; to adopt a general plan of hospital development; to estimate the probable cost of the plan; to submit a comprehensive plan for the development of each hospital site; to recommend to the legislature each year an expenditure equal to one-tenth of the cost of the plan when completed; and to investigate the problem of the proper care of the feebleminded.

This bill appropriates for construction $299,254.85 for the Utica Hospital, with an additional authorization of $950,745.15, and $100,000 for the hospital at Middletown, with an additional authorization of $269,000.

The Appropriation Bill provides $898,470 for the state hospitals, with an additional authorization of $417,000. The Brooklyn, Central Islip and Manhattan State Hospitals will be benefited most by this appropriation, which is for new construction.

The Appropriation Bill provides $614,500 this year and authorizes in addition $529,600, for new construction at the state institutions for the feebleminded and epileptics. This will provide for one additional cottage at the State Custodial Asylum for Feebleminded Women, at Newark; for the completion of four cottages and the construction of eight additional cottages at Letchworth Village; for the construction of dormitories to replace Letchworth House at the Craig Colony for Epileptics, besides other construction and permanent betterments. At Letchworth and Newark there will be approximately nine hundred additional beds provided.

Chapter 354 (1917) establishes a board of child welfare for Dutchess County. The board is to have powers and duties with respect to destitute, neglected, delinquent and defective children under sixteen years of age. The term defective child applies to one who is insane, epileptic, idiotic, imbecile, feebleminded, blind, a deaf mute, or physically crippled. One of the duties of the board is to provide for mental and physical examination of any child coming under its care or supervision who is suspected of mental or physical defect or disease. Another duty is to co-operate with the state institutions in ascertaining the home conditions, habits and character of the parents before a child is discharged, and to make recommendations as to the advisability of returning the child to his home. When it seems unwise to have the child returned to his home, he may be paroled into the custody of the board.

Chapter 553 of the laws of 1917 provides that the board of education of each city and of each union free school district shall within a year ascertain the number of children attending the public schools under its supervision who are retarded mentally three years or more. In case there are ten children or more thus retarded, special classes of not more than fifteen each must be established for their education.

Chapter 431 of the laws of 1917 places greater restriction than formerly upon the sale of habit-forming drugs. This law becomes effective August 1.

North Carolina

Chapter 150 (1917) provides for a consolidated board of directors for the hospitals for the insane. It also creates a purchasing committee for these institutions and for the school for the deaf, school for the blind, and the Caswell Training School.

Chapter 154 (1917) provides for the issuance of bonds to an amount not to exceed $3,000,000—$500,000 a year from 1917 to 1922 inclusive—proceeds to be used for state educational and charitable institutions, for permanent improvement and equipment. The State Hospital at Raleigh is to receive $200,000, the State Hospital at Morganton $200,000 and the State Hospital at Goldsboro $125,000.

A law has been passed in the 1917 session providing for the appointment of a guardian for an infant, idiot, lunatic, inebriate, or an inmate of the Caswell Training School, after a hearing, upon application of anyone to the clerk of the courts.

The legislature has passed an act providing for the establishment of a reformatory for women.

In the case of women convicted of sex offenses, commitments are to be for not less than 30 days or not more than three years.

The bill provides for the parole of inmates and also for the employment of a physician.

North Dakota

Senate Bill No. 90 which was passed March 16, 1917, locates the asylum for insane, which was authorized by the amendment of the Constitution of North Dakota approved by the electors of the state at the last general election, at or near Rugby, in Pierce County.

Senate Bill No. 191 has been passed, prohibiting and restricting the selling, prescribing or having possession of habit-forming drugs.

The legislature passed, but the Governor vetoed, a bill which would add insanity to the list of causes for divorce.

Ohio

Legislature appropriated $250,000 to erect eleven cottages, $24,000 for equipment for the new cottages, and $25,000 for a tuberculosis hospital at the Columbus School for the Feebleminded; $270,000 was appropriated to erect eleven cottages at the Ohio Hospital for Epileptics at Gallipolis. No appropriation was made for furnishing these cottages. By these appropriations 600 additional feebleminded and 600 additional epileptics will be provided for.

The legislature appropriated $100,000 for a building and $12,000 for equipment for the Bureau of Juvenile Research. As soon as the building is completed, all juveniles committed to reformatories, correctional institutions, the Institution for the Feebleminded, etc., will go to the Bureau of Juvenile Research to receive mental and physical examination. After thorough examination they will then be sent to the institution considered best adapted to their needs.

The Bureau will be located at the State Home for Feebleminded and will be under the direction of Dr. E. J. Emerick, superintendent of the Home.

Oregon

Chapter 354 provides for examination in County Court by the judge and two or more competent physicians, or two or more competent physicians and psychologists, of feebleminded or criminally inclined persons of over five years of age.

If the person is judged to be feebleminded, the judge shall commit him to the State Institution for the Feebleminded.

A copy of the order of commitment together with the personal and family history, shall be mailed immediately to the superintendent with a full copy of the report of physicians.

A person committed is to be conveyed by a member of his family or by a trained attendant of the institution in the same manner as is provided for the insane.

The expense of conveyance is to be borne by the county from which he is committed.

Allows for private detention and supervision if relative or guardian agrees to guard and supervise satisfactorily to the Court.

During the pendency of a hearing, no person convicted of delinquency or a crime, where judge believes person is feebleminded, shall be detained in any place provided for the detention of persons charged with, or convicted of, any criminal or quasi-criminal offense.

If any proper party shall be dissatisfied with finding of County Court, he shall have right to appeal to Circuit Court, and procedure will be same as before County Court.

Provides that County superintendents of schools make reports on June 1, and December 1 to County Court of names and addresses of all pupils and children of school age who are mentally defective, except that in school districts of the first class the city superintendents shall make said reports.

Superintendent of Institution for the Feebleminded may require a re-examination of any inmate, and if examination shows he is no longer a fit subject for the institution he may be transferred to a suitable institution or discharged.

Superintendent shall require an examination of any inmate upon written request of relative or guardian, relative or guardian to pay cost of examination.

County must provide suitable clothing from time to time in case parents or relatives can not.

A bill has been passed providing for transfer of patients to and from the state hospitals, the industrial and training schools, and the institution for the feebleminded.

Chapter 279 creates a State Board of Eugenics composed of the State Board of Health and the superintendents of the two state hospitals for the insane, the state institution for the feebleminded and the state penitentiary.

This Board is to examine into the innate traits, the mental and physical conditions, personal records, family traits and histories of all persons reported by the superintendents of the institutions.

If in the Board's judgment, procreation would produce children with an inherited tendency to feeblemindedness, insanity, epilepsy, criminality, degeneracy, and if there is no probability that the condition of the person examined will improve, or if the physical or mental conditions of such persons may be improved thereby, then the Board shall direct the superintendent of the institution to perform or to cause to be performed such type of sterilization as may be deemed best by the Board.

This is not intended as a punitive measure but for the betterment of the inmate or to protect society from the menace of procreation by this inmate.

Provides for appeal from the decision of the Board on the part of the inmate or his guardian, the decision to be made by the court.

Pennsylvania

A commission, named a year ago by the governor to study into the subject, has recommended that the state provide for the feebleminded blind as well as for the other blind. It recommends three classes of ten each at the institutions at Polk, Elwyn and Spring City.

A bill authorizing the directors or overseers of the poor to provide a building or rooms for the care, treatment and maintenance of persons temporarily mentally deranged has been passed.

An appropriation of $250,000 has been made by the 1917 session of the legislature for the commission appointed by the terms of an act passed in 1913 to provide for the selection of a site and the erection of a state institution for the care of inebriates. This bill makes provision for the commitment to and the discharge from this institution.

A bill has been enacted which provides for the selection of a site of not more than 500 acres and the erection of buildings for a state hospital for the insane to be located east of the Allegheny Mountains and to be known as the Eastern Hospital for the Insane.

South Carolina

A bill to establish a school for the feebleminded white persons of South Carolina, carrying an appropriation of $60,000, failed to pass.

South Dakota

The name of the South Dakota Hospital for the Insane has been changed by legislative enactment to the "Yankton State Hospital."

Sterilization bill has been passed to prevent "procreation of idiots, inebriates, imbeciles, and feebleminded persons."

The superintendent of the State Home for the Feebleminded is authorized to examine the mental and physical condition, records, and family histories of inmates to determine whether it is inadvisable to allow such to procreate, and to make an annual report of the examinations to the State Board of Charities and Corrections.

The Board, with the superintendent, must carefully examine the record of each inmate, and if a majority decide that procreation by any would produce children with a tendency to disease, feeblemindedness, idiocy, or imbecility, or if his condition would be improved thereby, then the physician of the institution or one whom he selects shall perform the operation.

The superintendent of the institution is to keep a record of all who are operated on with data and notes of observation regarding its benefits, and to report annually to the governor.

House Bill No. 59 which has been enacted, provides for the transporting of a non-resident inmate of the State Hospital for the Insane to the state of his residence, and particularly to a similar institution of such state.

The legislature has appropriated $22,000 for the purchase of one hundred sixty acres of land adjoining the farm at the hospital for the insane at Yankton. This institution has also received $40,000 with which to continue the construction of the Women's Infirmary, $7,000 for building and furnishing two cottages, and $5,000 for the construction of a pavilion on the park grounds of the hospital.

The State School and Home for the Feebleminded, at Redfield, has received an appropriation of $120,000 for the completion of the main building. The 1913 legislature appropriated $30,000 for this building.

Chapter 93 appropriates $10,000 for investigation, plans and specifications for the erection of buildings at the Northeastern Hospital for the Insane, previously established and located at Watertown. This institution will be designated as the "Watertown State Hospital."

Tennessee

The legislature of Tennessee has enacted a child welfare law to regulate the care of dependent and delinquent children, and all institutions and agencies dealing with them.

Texas

The Texas legislature has appropriated $400,000 for the building of a new hospital for white insane persons to be known as the Northwest Texas Insane Asylum. The hospital is to accommodate at least 1,000.

Chapter 198 of laws of 1917 provides for a hospital for colored insane persons at Rusk on the property now held by the state and used in part for a penitentiary, to be known as the Hospital for Negro Insane. As soon as practicable all insane negroes who are confined in other hospitals for the insane or in jails will be transferred to this institution, and negroes will be committed to it.

The board of managers, superintendent, officials and physicians, and as many of the other employees and attendants as practicable are to be white persons. It provides for erecting new buildings and remodeling old ones and carries an appropriation of $200,000.

Utah

The bill providing an institution for the feebleminded failed to pass.

Vermont

Chapter 115 creates the office of Director of State Institutions. The director is to be appointed biennially by the governor with the advice and consent of the senate. He is to have under his supervision the Vermont State Hospital for the Insane, the Vermont State School for Feebleminded, state prison, house of correction and industrial school and is to render a report at the end of the biennial period showing the work done, conditions and needs of these institutions, together with a report of receipts and expenditures.

A Board of Control has been created to have control of all boards and departments and institutions of the state.

The board is to be composed of the governor, state treasurer, auditor, director of state institutions and an additional member to be appointed by the governor.

It is to hold monthly meetings and the different departments of the government are required to make monthly reports to it.

The appointment of all assistants of any department is subject to the approval of the board.

The compensation of all the assistants of the departments is subject to the approval of the board except those whose pay is determined by state law.

This board with the chairman of the finance committee in the senate, of the ways and means committee and the committee on appropriations in the house are to prepare a budget to submit to the legislature.

Director of State Institutions is a newly created officer to take over the work previously done by the board of penal institutions, trustees of the state hospital for the insane and trustees of the school for the feebleminded.

He is authorized to establish detention farms, with the approval of the Board of Control, where persons now confined in jail may be detained.

A Board of Charities and Probation has been created. This is an unpaid board and has supervision over dependent delinquents and neglected children committed to it by the juvenile court. Has the power of investigation over all public charities. Administers the probation law of the state.

The appropriation bill provides for the erecting and equipping of a girls' dormitory at the State School for Feebleminded Children.

West Virginia

Bill for the establishment of a school for the feebleminded failed to pass.

Wyoming

Chapter 2 of the laws of 1917 is an act to submit to the voters of Wyoming, at the next general election, an amendment to the constitution providing for the prohibition of the manufacture, sale and keeping for sale of intoxicating liquors. This amendment if carried would be effective on January 1, 1920.

Chapter 95 of the laws of 1917 appropriates $5,000 for additional farm lands for the Wyoming State Hospital for the Insane, at Evanston.

The Chief of Police at Berkeley, California, has planned a school of special instruction for the police of Berkeley. Paul Jerome Anderson has been appointed instructor in psychiatry. White's "Outlines of Psychiatry" is to be used as the textbook in psychiatry.

RECOMMENDATIONS OF INDIANA COMMISSION ON MENTAL DEFECTIVES

The commission appointed a year ago by the governor to study problems of mental defectiveness in Indiana recently reported:

1. Over a thousand persons lack proper treatment because of insufficient accommodations in state hospitals.
2. Recommends new buildings on grounds of present hospital, or if possible farm colonies.
3. Recommends increasing capacity of the Indiana village for epileptics from 305 to 1,200, especially increasing the accommodations for women.
4. Recommends that all general hospitals provide wards for observation and detention pending commitment.
5. Recommends that no cases be placed in jail.
6. Recommends law authorizing voluntary commitments.
7. Recommends amending commitment law for the feebleminded so as to allow of admission of feebleminded male adults as is now provided for feebleminded women.
8. Recommends enlarging the school colony for feebleminded at Fort Wayne by establishing a colony in the southern part of the state on a site of not less than a thousand acres.
9. Recommends separate classes for mentally retarded children.
10. Recommends mental examination for all school children.

The physicians of the Webster County Medical Association in session at Fort Dodge recently passed a resolution condemning the methods of procedure in insane cases in Iowa. In their opinion it is absurd for a court or jury of non-medical men to decide such cases. They suggested that an appeal board should be created of which three superintendents of state hospitals should be members.

The Iowa State Medical Society recently passed a resolution instructing the president of the association to appoint a committee of three to confer with a committee of the State Bar Association for the purpose of drawing up a bill, making the determining of the sanity or insanity of a person, a physician's duty. Under the present law, a person being tried for insanity is taken before a court and the judge determines whether the person is sane or insane, irrespective of the verdict of the examining physician.

The school board of Baltimore is considering plans for the establishment of clinics in the various schools in the city for the treatment of children who are mentally and physically defective.

Over twenty-five hundred visits were made by social service nurses in connection with state hospitals for the insane in Massachusetts during a recent period of three months.

A committee on the conservation of child life has been appointed by the State Health Commissioner of Massachusetts. Among the consulting members are Dr. Walter Fernald, Superintendent of the Massachusetts School for the Feebleminded, and Dr. William Healy, formerly Director of the Psychopathic Institute of the Chicago Juvenile Court, recently appointed to the position of Director of the Psychopathic Department of the Juvenile Court in Boston, established under the Judge Baker Foundation.

The New York State hospitals are conducting twenty-six mental clinics at the state hospitals and in neighboring communities. The average attendance is about 500 a month.

A clinic for mental diseases and mental defects for children in the public schools of White Plains, New York, has been successfully conducted for the past three years by the Bloomingdale Hospital. The teachers are asked to refer to the physicians any child who seems to be defective or abnormal in his behavior. The clinic is held one afternoon each week in one of the school buildings.

It is reported that the state of New York is expending annually $2,000,000 in support of 9,000 aliens who have been committed to the state institutions.

DEVELOPMENT AT RANDALL'S ISLAND

The Advisory Board of the Children's Hospital and School on Randall's Island, which was appointed in 1916 by the Honorable John A. Kingsbury, Commissioner of Public Charities of New York City, in a recent report made the following recommendations:

1. The study, diagnosis and classification of newly admitted cases and the establishing of close relations with the schools, courts and social agencies of New York City.
2. Education to fit the defectives for life in other institutions.
3. Education for supervised community life.
4. Permanent care for feeble young children with greatest defect and the higher grade cases who can help in the operation of the institution, but whom it is unsafe to return to the community.

The Board further recommended that the institution be made an educational rather than custodial institution; that the population be limited to 2,500 and for the present to 2,000; that nearly all the old buildings be destroyed.

The Board of Estimate appropriated $600,000 last year and $1,000,000 has recently been granted. This sum will provide for 11 new cottages.

The city of Akron, Ohio, is considering establishing a city school for the feebleminded.

The state institutions of Ohio are planning to raise this year sufficient farm products to provide for their 22,000 patients.

About 4,500 insane are reported in the Philippines of whom about 800 are cared for in institutions for the insane. These are mostly the criminal insane and violent cases, but it is hoped that a pavilion for milder cases will be built at the San Lazaro Hospital. There are two hospitals for the insane in the Philippines, both of which are in Manila. One is a church institution, and the other the regular government hospital.

With a view to protect the race against venereal disease, the Canadian National Council of Women, who met at Winnipeg, passed a resolution urging the provincial governments to make it a law that before marriage licenses should be granted, health certificates must be produced.

Four mental clinics have been established this winter and held monthly by the medical staff of the Kalamazoo State Hospital, Michigan, under the auspices of the juvenile courts assisted by the nursing service of the charitable organizations who conduct the follow-up work.

The government of Ontario is being urged to establish two industrial farm colonies, one for girls and one for boys. These are to accommodate 500 pupils of the higher grades of mental defectiveness and to train them for self-support. The aim is educational rather than custodial.

A school for feebleminded colored children will be opened this fall in connection with the hospital for the insane at Petersburg, Virginia, under the direction of Doctor Drewry.

Psychologists and the War

Psychologists are united in an effort to render their professional knowledge and skill serviceable to the nation in its military need.

A general Psychological Committee has been organized by the National Research Council. This Committee, under the chairmanship of the President of the American Psychological Association, Prof. Robert M. Yerkes of Harvard University, represents the National Society of Psychologists in the Council for Defense of which the National Research Council is now a department.

The Council of the American Psychological Association has voted that the resources of psychological laboratories be made available for work on psychological aspects of military problems. Almost without exception institutions and individuals have responded favorably and enthusiastically to this suggestion. The Council has also authorized the organization of several committees to deal with special topics in military psychology. A list of these committees, with their special tasks, will indicate the scope of the work in which the psychologists of the country are interested:

Preparation of bibliographies and abstracts of psychological literature relating to military affairs. Chairman, Prof. Madison Bentley.

The preparation of methods for the psychological examination of recruits. Chairman, Prof. Robert M. Yerkes.

The selection of men for tasks requiring special skill. Chairman, Prof. E. L. Thorndike.

Psychological problems of aviation, including the examination of aviators and the relation of the aviator to mechanical factors. Chairman, Dr. H. E. Burtt.

Psychological problems of incapacity, especially those of "shell-shock" and re-education. Chairman, Dr. S. I. Franz.

Psychological aspects of vocational advice and training. Chairman, Prof. John D. Watson.

Psychological problems of recreation in the Army and Navy. Chairman, Prof. George A. Coe.

Pedagogical and psychological problems of military training and discipline. Chairman, Prof. Charles H. Judd.

Problems of motivation in connection with military service. Chairman, Prof. Walter D. Scott.

Problems of emotional stability, fear and self-control. Chairman, Prof. Robert H. Woodworth.

Acoustic problems of military importance. Chairman, Prof. Carl E. Seashore.

Visual problems of military significance. Chairman, Prof. Raymond Dodge.

THE MAUDSLEY HOSPITAL, LONDON

Eight years ago Dr. Maudsley offered a large part of his fortune to the London County Council to build this hospital for early treatment of mental diseases. After much obstruction and delay the present admirable site at Denmark Hill was secured and the hospital built. With the consent of Dr. Maudsley the Council permitted it to become a section of the 4th London General Base Hospital; at present it is adapted to the treatment of 175 soldiers and eighteen officers suffering with "shell-shock," neurasthenia or acute mental disorder. The pathological laboratory at Claybury has been transferred to the Maudsley Hospital, and the director, Major F. W. Mott, continues to carry on the pathological work of the London County Asylums, while at the same time he takes an active part in the medical work and the general management of the hospital. When the King and Queen recently visited the Maudsley Hospital they expressed themselves as well pleased with the accommodation and general arrangement for the treatment and comfort of the soldiers.

A large hut is now being constructed in the grounds to be equipped for carpentry, cabinet-making and metal work, under a capable instructor, as a means of treatment by useful diversion of the mind of convalescent cases of shell-shock. The whole, together with upkeep, has been generously provided by Lady Henry Bentinck.

The hospital will be taken over by the London County Council after the war is over. The Nineteenth Annual Report of the Asylum's Committee says that "the most forcible argument for the provision of the hospital from the point of view of the patient lies, as it seems to us, in the fact that it will provide opportunity for individual treatment and close personal attention, which are all important in the early stages of mental disorder," also, "in the proposed hospital only those patients will be detained for whom treatment is necessary and who respond to it." Hence there will be in the hospital an entirely different atmosphere, as Dr. Maudsley has expressed it, of sanity as opposed to insanity. The hospital will be essentially an institution for providing treatment, the direct object of which will be the care and discharge of the patient.

The report refers to the advantage of having such a hospital in the London area, and points out the public utility of an out-patient department where persons in the incipient stages of mental disorder can be taken for advice and treatment. "We are hopeful that this provision by the prevention of insanity will afford relief to the rates." The report also attaches importance to the value of the hospital and pathological department as a center of education and research. Expectation is expressed that the hospital will prove of great value in the dissemination of knowledge of mental disease and in the provision of systematic instruction in methods of treatment. The report says, "At present the study of insanity is to a great extent an isolated branch of medical research, and the general practitioner knows little of what is considered to be the province of the alienist and neurologist. This is not to the advantage of the public, and if this unfortunate isolation were removed and a close acquaintance with nervous and mental diseases were more common, many cases of incipient insanity which now find their way ultimately to the workhouse and the asylum might be recognized at an earlier and more hopeful stage, and by preventive as well as remedial measures, might be so dealt with as never to need institutional confinement." "A hospital in close touch with the University, the general hospitals and their medical schools, and with a central pathological laboratory should do a great deal to bring this about. The teaching of the hospital should also increase the supply of trained medical officers available for service in the asylums." Editorial, *British Medical Journal*, January 13, 1917.

NEW INTERNATIONAL PERIODICAL

A new periodical—the *Archives Suisses de Neurologie et de Psychiatrie*—began publication with the new year. Its contents are in the three national languages of Switzerland—French, Italian and German. It is intended to be an international organ, the collaboration of foreign workers to be accepted, and the periodical to serve as a medium of communication between those who under existing conditions are prevented from corresponding in the journals of their respective countries. The Editor is Professor Constantin von Monakow of Zurich, who has Drs. Dubois of Berne, Weber of Geneva, Maier of Zurich and Manzoni of Tessin as collaborators. The new periodical is published by Orell-Fussli of Zurich.

NEW ENGLISH JOURNAL ON RE-EDUCATION OF DISABLED SOLDIERS

Recalled to Life is the title of a journal devoted to the care, re-education, and return to civil life of disabled sailors and soldiers, the first number of which has just been issued under the auspices of the War Office of Great Britain, the Pensions Ministry and the Red Cross and Order of St. John of Jerusalem Joint War Committee. Lord Charnwood is the editor and Everard Cotes assistant editor. The publishers are John Bale Sons and Danielsson, Oxford House, London.

The editors in their introduction say: "It is the purpose of this journal to diffuse as widely as possible among those who are in any way concerned with the welfare of our soldiers and sailors returning disabled from the war, and not less among such sailors and soldiers themselves, knowledge as to the means by which they may be restored, as nearly as the nature of their injuries permits, to full participation in, and full enjoyment of, the activities of civil life."

A preliminary survey of various restoration agencies is given in articles by authorities, with descriptions of the work being done in restoration to health, provision of training facilities for learning new trades, and finding of employment for those who need such assistance. The articles are illustrated by reproduction of photographs of the men at work in the shops and classrooms of the various restoration agencies.

Among the contributors are Sir Alfred Keogh, G.C.B., Director-General of the Army Medical Service for the Anglo-Belgian Committee; Sir Arthur Griffith-Boscawen, M.P., Parliamentary Secretary, Ministry of Pensions; Colonel Sir Robert Jones, C.B., Military Inspector of Orthopedics, and Captain Basil Williams.

ONTARIO MILITARY HOSPITAL, COBOURG

The Hospital for the Insane at Cobourg has been converted into a military hospital, to be known as the Ontario Military Hospital, Cobourg. Extensive alterations have been made in the interior of the building in order to provide proper facilities for the treatment of mental and shock cases. On the ground floor two bathrooms, each equipped with two continuous flowing baths, have been added, and adjoining each bathroom is the massage-room, equipped with marble massage slab, shampoo faucets, etc.

In the basement four treatment rooms have been provided. One room is set apart for electric treatment and is equipped with a high-frequency machine and a treatment wall-board. In another room are continuous flowing baths and an electric-hydric bath, together with apparatus for the application of faradic, galvanic and sinusoidal currents. A third room is equipped with a controlling table of marble arranged with mixing chambers with the necessary hot and cold water supply valves for the control of the Scotch douche, needle sprays, waves, showers, etc. In this room are also located electric light and hot air baths, as well as marble massage slab.

Another room is set apart as a dressing and rest room, and is equipped with the necessary beds, blanket warmers, etc.

Dr. F. S. Vrooman, Assistant Superintendent at the Brockville Hospital for the Insane, has been appointed medical superintendent, and Dr. H. A. MacKay, Resident Physician at the Ontario Reformatory, Guelph, and formerly of the Toronto Hospital for Insane, has been appointed assistant.

The city of Treviso in Italy has organized a hospital, with 100 beds, for special treatment of nervous and mental affections among the troops. Professor Zanon, director of the insane asylum for the province has been placed in charge of the new war psychiatric hospital.

Psychiatry and Neurology in the French Army

The *Revue Neurologique* for November–December, 1916, contains besides the usual reviews and interesting special case reports of the Paris Neurological Society, a series of condensed reports of the work of the neurological, psychiatric and neuro-psychiatric centers under military control in France. Familiar names appear. Déjerine has one "militarized" neurological service at the Salpêtrière and Pierre Marie another. Babinski has a similar service at the Pitié and Souques at the Hospice Paul-Brousse.

Reports from various military regions and sectors appear. H. Français reports from the neurological center of the 2nd sector and the 3rd region at Évreux, and Claude from the neurological center of the 8th region at Bourges. Other regions are represented as follows:

The	9th (Tours)	by Vincent
	10th (Rennes)	by Chiray
	13th (Vichy)	by Lortat-Jacob
	14th (Lyons)	by Sollier

15th Marseilles by Sicard
16th Montpellier by Grasset and Villaret
19th Algiers by Porot.

The 6th army also has a neurological center controlled by Guillain. [illegible] reports from several neurological centers in connection with various armies, having been shifted about by the circumstances of war.

But in addition to these militarized neurological services in Paris and elsewhere, the regional neurological centers and the army neurological centers, it is interesting to find that the important psychiatric side of the war gets its representation in the nomenclature. For example, there is a center for psychoneuroses in the military government of Paris, created in 1915 by the late Professor Ballet and now directed by Laignel-Lavastine.

The 14th region (Lyons) besides having its neurological center under Sollier, has its psychiatric center (Centre de Psychiatrie) directed by Lépine.

The 16th region besides having its neurological center at Montpellier, has a so-called neuro-psychiatric center directed by Mairet. The 18th region (Rochefort) has an annex assigned for physiotherapy and neurology.

Moreover, one of the armies, the 2nd, has its neuro-psychiatric center directed by Léri, who reports that 91 per cent of all the nerve cases including the organic ones in the period from July to October, 1916, could be sent back to the front and only 9 per cent evacuated to the interior. Among these patients were, besides functional cases, a number of curable organic cases. "Who knows," says Léri, "how many neuroses are created and fixed in the hospitals of the interior which have begun in slight organic disorder?"

The army whose number is censored at Épinal has also a neuro-psychiatric center. The reports from these centers occupy 147 pages. Following the reports of scientific activities of these neurological and psychiatric centers is an interesting report of a meeting of the Paris Neurological Society at which the chiefs of the military neurological and psychiatric centers discussed the question of invaliding and compensation.

Omitting the details of the reports that deal with neurology in a narrower sense, we may enumerate briefly the psychiatric matters of interest which appear in these reports from the centers.

Even the centers called neurological deal with important psychiatric matters. So-called physiopathic disorders have begun to figure (Pierre Marie), including various painful neuritides, obstinate contractures (mains figées, Meige), a sort of motor torpor of the hands. Neuropathic troubles are reported by Marie as less frequent in the Paris centers now that they have begun to be treated immediately after their appearance in the army neurological centers. Marie commends treating them with firmness and tenacity. Complaint is made that nervous invalids fill up the beds in the neurological services to the detriment of the curable wounded. "Accordingly there ought to be," says Marie, "special institutions for chronic victims of nervous disorder."

Babinski finds new support for his older opinions concerning hysteria. A book on this topic is to appear.

Souques has been studying camptocormia, a functional bending in of the trunk, curable by any method of counter suggestion. Souques has used a plaster corset which, he says, must be definitely used as a suggestion and not as an orthopedic measure.

The hospital for psychoneuroses at Paris under Laignel-Lavastine founded in 1915 has had annexed to it under the name of "isolation service," another therapeutic service known as "*coercitive.*" The center for psychoneuroses now contains 550 beds and has dealt with neuropsychic disorders following shell explosion, simulators, exaggerators, theatrical reactions on the part of cured soldiers sent back to the colors, psychopaths illegally decorating themselves, psychopathic phenomena following anti-typhoid vaccination, an interesting group of constitutionally abnormal persons (for whom certain places for safe-keeping are suggested: Colin at Villejuif has an approximation to such a psychiatric prison called a "quarter for difficult insane") and a variety of already well-recognized nervous troubles. Laignel-Lavastine proposes to separate completely the functional syndromes from the so-called physiopathic syndromes of Babinski and Froment. The particular physiopathic disorders in this group which Laignel-Lavastine finds are in the motor and vascular fields so that he speaks of "physiopathic vasculo-muscular syndromes."

Vincent in the 9th regional center at Tours has worked especially upon the intensive treatment of hysterics. He finds practically that he needs to re-educate separately the arm, the leg and the mind. The groups are commanded by former wounded persons who are now convalescing. The re-education takes four hours a day, two hours in the morning and two in the afternoon. All possible freedom is otherwise allowed them, since it is regarded as the duty of these men to get well as soon as possible in order to go back to the front. In six months 1,173 patients have been treated; 288 have been cured, of whom 250 were hysterics and 38 had slight organic lesions, that is, about one in four of these men returned to the front. It will be observed that the hysterics count as six to one against the organic cases. Hysterics, according to Vincent, ought to be cured in about 90 per cent of the cases. Hysterics kept for a long time in the Midi region are much more difficult to cure than those in the 9th region.

Sollier reports an extraordinary diminution of his cases of hystero-traumatic functional disorders: 259 in the five months of 1914, 271 in 1915, and but 31 in nine months of 1916. Curiously enough not only these hysterical manifestations but also the so-called reflex paralysis of Babinski and Froment disappeared in a similar manner. Sollier's therapeutics consists in manual forced mobilization, also a method called "torpillage," consisting in the application of the galvanic current to the body to learn which movements the patient is really able to perform. The current is also applied to excite sensation in the limbs. According to Sollier, the essential trouble in hysterics is anesthesia and this anesthesia is not psychic but of a physical order.

Lépine in the psychiatric center at Lyons has had much to do with shell-shock and speaks also of the importance of syphilis and alcoholism (alcoholism appears to have been very unequally suppressed in parts of France, and alcoholics appear in 30 to 35 per cent of the admissions).

A variety of persons from 40 to 46 years have become victims of progressive hemiplegia to which they succumb in an interval of a few days to a month. These cases are not alcoholic. Some of them are tuberculous. Syphilis probably causes some. The victims are not soldiers so much as workers in various painful tasks. Paranoid cases are also often sent in from the psychiatric centers of the front.

Grasset has been particularly interested in invaliding propositions assigning percentages for the compensation in various disorders.

The Algiers clinic speaks of special syndromes in the Senegalese. These subjects have ideas of persecution and react with remarkable speed to their ideas, going on fugues or attempting suicide. One walked away from the hospital for a full twenty-four hours before he was taken. One hid for thirty-six hours in a tree. Psychoses of recurrent fever and of malaria are reported.

PSYCHOPATHIC SOCIAL SERVICE

The Psychopathic Hospital of Boston offers to social workers eight months' study and practice in the Social Service Department, planned to supplement previous training and experience by affording an opportunity for special experience with psychopathic patients and knowledge of mental defect and mental disorder. The course covers the following: field work, methods of recording, selected reading, special lectures, daily staff meeting of physicians, weekly staff meeting of psychologists, daily case discussion of social workers, and clinic management. Under some circumstances the trustees arrange for specially trained workers to receive maintenance in the hospital as internes.

BOOK REVIEWS

The Jukes in 1915. By Arthur H. Estabrook, of the Eugenics Record Office, with a preface by Charles B. Davenport. Carnegie Institution of Washington, Publication No. 240.

The readers of Mental Hygiene need no introduction to "The Jukes" of past generations as described in the classical work of Robert L. Dugdale in 1875. "The ancestral breeding-spot of this family nestles along the forest-covered margin of five lakes, so rocky as to be at some parts inaccessible." Since Dugdale's time the Jukes have left their original habitat, and "now there is not a single Juke living in the ancestral area, and only ruins of their abodes remain." The descendants of to-day are to be found in various localities in at least fourteen states of the Union. "One thousand two hundred and fifty-eight individuals descended from the five original Juke sisters are living in 1915."

It is, of course, interesting to know what has been the effect on this family of its dispersion with resulting alteration of environment, exposure to new influences, chances of introduction of other blood, and the correctional efforts exerted upon it by the various communities in the midst of which its representatives have found their homes.

"The present study of the Juke family was made possible by the chance discovery of the original manuscript Juke record of Dugdale. In the fall of 1911 Mrs. O. F. Lewis, wife of the General Secretary of the Prison Association of New York, while looking over a lot of papers stored away in the cellar of the Prison Association building, found this valuable paper in Dugdale's handwriting. It was recognized by Dr. Lewis, who kindly gave the *Eugenics Record* office permission to copy the names and other data not found in the Juke publication. With the names as a foundation the present study has resulted."

Of the 1,258 individuals mentioned above, 186 are under the age of six. Three hundred and twenty-four are between the ages of six and fifteen; the school record of 227 of these has been studied; the record of 31 was "good," 113 "fair," and 83 "poor." Of 625 grown-up individuals, including all men over the age of nineteen and all women over the age of fifteen, investigated with reference to social reaction, 65 are classed as good citizens, 255 as "fair," and 305 as "poor," *i. e.* anti-social in their behavior, being prostitutes, criminals, drunkards, etc. The new conditions have not made much improvement in the Jukes!

This study by Dr. Estabrook makes a valuable complement to the older study by Dugdale.

A. J. Rosanoff, M.D.

BEING WELL-BORN—AN INTRODUCTION TO EUGENICS. By Michael F. Guyer, Ph.D. Indianapolis: The Bobbs-Merrill Company, 1916.

This little volume of nearly 400 pages is one of the Childhood and Youth Series edited by M. V. O'Shea, Professor of Education at the University of Wisconsin. The publishers say, "The Childhood and Youth Series is the first systematic attempt to give to parents, teachers, social workers and all others interested in the care and training of the young, the best modern knowledge about children in a manner easily understood and thoroughly interesting."

The main argument of the book is well summarized in the following paragraph in the preface by the author: "Once grasp the truth that a child's fate in life is frequently decided long before birth, and that no amount of food or hospital service or culture or tears will ever wholly make good the deficiencies of bad 'blood,' or in the language of the biologist, a faulty germ-plasm, and the conviction must surely be borne home to the intelligent members of society that one thing of superlative importance in life is the making of a wise choice of a marriage mate on the one hand, and the prevention of parenthood to the obviously unfit on the other."

Chapters I–V present in popular and very readable language general principles of genetics with frequent reference to the biological material on which they are based. Chapter VI, dealing with prenatal influences other than heredity, contributes towards a salutary balance in the course of the argument.

The next chapter is devoted to a discussion of responsibility for conduct. As within the limits of such a chapter, the material for this discussion is well chosen and admirably presented; yet neither full consistency nor real clearness has been attained in the treatment of the philosophical bearing of this material. The author's conclusion at the end of the chapter may seem clear but is not so in reality: "All can not be held equally responsible ethically, but the lowermost limit of obligatory response to social and ethical demands necessary to rank one as within the pale of normal conduct is at such a level that any one not an actual defective can in a reasonably wholesome environment surmount it. All normal men are responsible for their conduct." What does he mean by "responsible"? Does he mean liable to punishment for crime, or does he mean liable to treatment, at the hands of society, freed from all motive of retribution and calculated as far as possible to restore damage and prevent future damage? If the former, then the reviewer, for one, would say without hesitation that the author is wrong; if the latter, then he is right but does not go far enough, as by that definition obviously both "normal" and "abnormal" men are responsible. Furthermore, what is the "lowermost limit of obligatory response," what is "any one not an actual defective," and what is a "reasonably wholesome environment"?

The remaining three chapters are devoted to what may be termed applied genetics or eugenics proper, and deal mainly with the problem of prevention of constitutional mental disorders. If ever this problem is solved, it will be perhaps by the combined contributions of biology, psychology, psychiatry, and sociology; many a writer with only a one-sided equipment has burned his fingers in the handling of it. In the book before us, were the author as competent a psychiatrist as he is a biologist, would he still say, " . . . we are still forced to believe that an alarming increase in insanity is in progress and that society is woefully derelict in permitting the marriage of such unfortunates"? However, it should be added that, if inaccuracies and other imperfections are to be found here and there—such as are almost inevitable in a first edition of such a book as this—its general merit is high, and we wish it a favorable reception. The need for dissemination of such knowledge as we have on eugenics is great. This book is well adapted for that purpose and by slight alteration, upon a call for a second edition, could be made perhaps unexceptionable.

A. J. Rosanoff, M.D.

Social Diagnosis. By Mary E. Richmond, Director, Charity Organization Department, Russell Sage Foundation. New York: Russell Sage Foundation, 1917.

To the mental hygienist social diagnosis is hardly less important than mental diagnosis, for social disorder and mental abnormality appear as two aspects of the same case. To know whether social factors are contributing to the maladjustment of a psychopathic individual is a part of psychiatric study, which is recognized in the development of social service as a part of mental hygiene. The social worker in the mental hygiene field has the same need of careful and exact methods as the social case worker in other fields. At the Psychopathic Hospital in Boston, the social workers had formed a class to study Miss Richmond's "Social Diagnosis" within two weeks of its publication. The great value of the book is that it is the first to put substantially before us this fundamental concept of social work—that there is a definable technique in case work. To most people social work is a perceptible presence without parts and of uniform substance throughout. To hold that view unbroken after reading Miss Richmond's careful analysis would be difficult. The long and rich experience of the author, moreover, puts a high value upon her conclusions.

The first chapter briefly traces the evolution of social case work from the well-meant but aimless attempts at "doing good" to present-day standards which "are being advanced to a point where they can be called professional." The term "diagnosis" is used to include the collecting of evidence in regard to an individual's social condition, the conclusion drawn from this information, and the plan of treatment to be followed. The three sections of the book deal with (1) evidence, (2) sources from which evidence is obtained, (3) variations in evidence pertinent to different types of case, such as the neglected child, the immigrant, the homeless man. The chapters on social evidence are especially valuable as an adaptation of legal experience to social work. The second section deals in great detail with all possible sources of information and contains an abundance of concrete illustrations from case records. The third section consists of questionnaires relating to different types of social disability.

The reader is likely to be confused by the unusual use of "diagnosis" and to find that he must reclassify the material of the book before he can use it. The customary terms, examination, diagnosis, prognosis, and treatment, while they express overlapping processes, afford a framework for thought which the ordinary person finds an acceptable support. Further confusion may be caused by the particularity with which relatively unimportant matters are expanded, so that the reader has difficulty in maintaining a perspective.

The absence of any consideration of the psychiatric point of view in individual study is very noticeable; for although the author speaks of the necessity for "an understanding of characterology, for which no satisfactory body of data yet exists," there is a conspicuous lack of reference to such psychopathic conditions as Healy discusses in twenty chapters out of twenty-seven in the section of Causative Factors in his "Individual Delinquent," and there is no direct discussion of instincts, emotions, and habits as factors in producing conduct. Failure to recognize the objective methods in the study of individuals is a serious omission. The author seems to advocate the traditional method of "put yourself in his place," although psychiatry is teaching social work that observation is a finer tool than sympathetic introspection.

As the first book on social case work, this volume will be received with great gratitude by social workers everywhere. It is a big task to bring order into a field so vast, complex, and uncharted as this business of reorganizing disordered lives. Although an enormous amount of such work has been done with a large measure of success, it has been done by persons not trained to conscious skill or analysis of processes but guided largely by intuitions, because no body of knowledge and no adequate training has existed. As a first step toward scientific method this book is invaluable.

It is to be hoped that it will have many readers among persons, other than social workers, whose work or general interests give them concern for individual human lives. The book is exceedingly well composed typographically, and, with chapter summaries, a good index, and a full bibliography, is a very convenient and likable volume.

MARY C. JARRETT.

ANTHROPOMETRY AS AN AID TO MENTAL DIAGNOSIS. By E. A. Doll, Assistant Psychologist, The Training School, Vineland, N. J. Publication No. 8 of The Training School, Department of Research.

Citing researchers in the past, Mr. Doll gives various statistics which show that the feebleminded were both shorter and lighter than the normal. Goddard collected data on approximately 11,000 feebleminded individuals ranging in age from birth to sixty years, and his tables and curves demonstrated that with but slight exceptions the feebleminded of both sexes were below the normal averages, and that the degree of subnormality bore a direct relation to the degree of mental defect, with the highest grades, the morons, closely approximating the normal.

The material for study used by Mr. Doll was obtained from the anthropometric data assembled since the establishment of the Research Laboratory at The Training School.

A careful description is given of the manner in which to compute the mental age of a given individual. The first table gives data of the original measurements for individual girls, classified by mental ages and arranged in order of chronological age. The second table shows the same for boys. For example, the first subject in Table 1 is a girl of mental age 1, whose chronological age is 8, and who measures 1114 mm. in standing height, 595 mm. in sitting height, and 17.5 kg. in weight; she failed entirely in the grip and vital capacity tests, with a consequent measurement of 0 for each. Other tables show the percentile averages for idiots (mental ages 1–2), imbeciles (mental ages 3–7), and morons (mental ages 8–11).

A summary of the results may be briefly stated as follows: The feebleminded of all grades are below normal in standing height. The higher mental types, the morons, approximate the normal, which conclusion is in accord with the findings of Goddard, Mead, and others. They also agree with the conclusions of Gratsianoff, Sack, Porter, MacDonald, Smedley, and DeBusk, with normal subjects, that bright children tend to be taller than dull. The feebleminded not only grow at a retarded rate but also cease growing at an earlier age. Sex differences are noticeable, but are not very significant. The mental age curve for boys is superior at six ages, and inferior at four ages, to that for girls. The total average height is 14 per cent nearer the normal for boys. Boys grow to a slightly later age than girls and at a slightly less retarded rate. The feebleminded of all grades are below normal in sitting height; the degree of subnormality is closely correlated with degree of feeblemindedness. Seventy-five per cent of all feebleminded fail to reach the normal average in sitting height. Taken alone, weight has but little value for diagnosis of feeblemindedness in the highest mental ages, but has some value in the lower ages. Approximately 40 per cent of all feebleminded reach the normal average, but the per cent applies chiefly to the higher types of defect. In the typical case it is highest of all the six measurements and is close to normal.

Mr. Doll's results would tend strongly to confirm the statement that strength of mind and strength of hand accompany each other. Strength of grip is so markedly subnormal that frequently the measurements fall outside the norms of comparison. Girls are markedly closer to normal than boys in strength of grip, and show a somewhat higher correlation with mental age.

As in strength of grip, so also in vital capacity all feebleminded are markedly below normal. Considering that it shows the greatest subnormality of all measurements, that it shows the least dependence upon height and weight, and a high correlation with mental age, and that only eight per cent of all feebleminded reach the normal average, Mr. Doll believes it could safely be taken alone as a highly reliable single index of mental incapacity.

The specific characteristics of epileptic and insane types in the measurements are not yet entirely clear. In general such clinical types show the general characteristics of the feebleminded reactions, but not their specific nature.

As Mr. Doll states, since this study deals primarily with only feebleminded subjects, it may be questioned how reliable the findings are among other groups of subjects as controls. He does not attempt to explain the results, nor are definite conclusions drawn, except for diagnostic purposes, and he is content to present the results as facts, hoping that the setting forth of them may encourage others to delve more deeply. To explain the results would necessitate a far more thorough understanding of the physiology and biochemistry of each case than was available, entailing untold research in itself vastly exceeding the present investigation.

One is rather fascinated with the thoroughness with which Mr. Doll has dealt with his subject. We find all such statistics novel and interesting. Yet one cannot help feeling that there is a futility about it all. Why should we depend upon exterior measurements and physical capacity to gauge the mentality of a human being? The clinical methods now used by the neurologist and psychiatrist permit of a precise mental analysis of the *psyche* itself. These as well as the psychometric tests already in use would seem to be the more direct and satisfactory mode of approach to the problem of gauging the mental age of the feebleminded and mentally defective, while the anthropometric data might be considered of secondary importance, to serve as a further corroboration of that which has already been found by careful examination of the individual case. However, Mr. Doll's work is an excellent study of its kind.

L. PIERCE CLARK.

OCCUPATION THERAPY—A MANUAL FOR NURSES. By William R. Dunton, Jr., M.D. Philadelphia: W. B. Saunders, 1915.

Occupation therapy covers a broad field of endeavor, of which, perhaps, the work with the mentally ill opens the greatest possibilities. It has exacted the services of those with large sympathies and tact, and who have been trained to impart the knowledge acquired by years of study and experience. It also demands that nurses shall have the training and ability to divert and occupy their patients either in the home or hospital.

The book by Doctor Dunton is not intended as a text-book for students of occupation therapy, but is, as the title and preface imply, "A Manual for Nurses."

It is explained that the book is the outgrowth of a series of talks that were given to the nurses at the Sheppard and Enoch Pratt Hospital, and throughout, the book is written either for the hospital or private nurse, particularly of mental disease.

That the author is a firm believer in occupation for nervous cases is made clear. The first chapter is historical. The value of a "hobby" and the "psychology" and "mechanism of recovery by occupation" are set forth. That the nurse can use to advantage the social instinct of the patients is recognized, and chapters are devoted to suggestions of the different modes of occupation that may be used to meet the varying interests of one or many patients. There are chapters on "Puzzles," "Reading," "Physical Exercise," "String Work," "Basketry," and "Needlework."

Practically all the occupations suggested are in simple form, the materials for which the nurse herself could own and have with her as part of her professional equipment. The bibliography of the subjects mentioned is distinctly valuable.

A printed form of the seven "cardinal rules in applying occupation therapy" with which the book concludes, can very well be placed in the hands of every nurse engaged in a hospital for mental treatment, and all nurses should have the book.

EMILY L. HAINES.

BOOKS RECEIVED

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THE CARE AND TREATMENT OF MENTAL DISEASES AND WAR NEUROSES ("SHELL SHOCK") IN THE BRITISH ARMY*

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INTRODUCTION

NO medico-military problems of the war are more striking than those growing out of the extraordinary incidence of mental and functional nervous diseases ("shell shock"). Together these disorders are responsible for not less than one seventh of all discharges for disability from the British Army, or one third if discharges for wounds are excluded. A medical service newly confronted like ours with the task of caring for the sick and wounded of a large army cannot ignore such important causes of invalidism. By their very nature, moreover, these diseases endanger the morale and discipline of troops in a special way and require attention for purely military reasons. In order that as many men as possible may be returned to the colors or sent into civil life free from disabilities which will incapacitate them for work and self-support, it is highly desirable to make use of all available information as to the nature of these diseases among soldiers in the armies of our allies and as to their treatment at the front, at the bases and at the centers established in home territory for their "reconstruction."

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*This article consists of sections of Dr. Salmon's report on his recent visit to England together with an appendix entitled "Facilities Needed for Efficient Treatment of Mental Diseases in a Modern Public Institution." For lack of space, the section, "Mental Diseases (Insanity)," and the appendices, "References in English to Mental Diseases and War Neuroses ('Shell Shock') and Their Treatment and Management," and "Special Military Hospitals for Mental Diseases and War Neuroses ('Shell Shock') in Great Britain and Ireland," are omitted. The full report will be published as a monograph, copies of which may be obtained from The National Committee for Mental Hygiene. The appendix entitled, "The Use of the Institutions for the Insane as Military Hospitals," was published in the July number of MENTAL HYGIENE.

England has had three years' experience in dealing with the medical problems of war. During that time opinion has matured as to the nature, causes and treatment of the psychoses and neuroses which prevail so extensively among troops. A sufficient number of different methods of military management have been tried to make it possible to judge of their relative merits. My visit to England was for the purpose of observing these matters at first hand so that I might contribute information which might aid in formulating plans for dealing with mental and nervous diseases among our own forces when they are exposed to the terrific stress of modern war.

Acknowledgments

I wish, at the outset, to record my appreciation of the many courtesies which enabled me to use the limited time at my disposal to the best advantage. The Army Council, upon the request of Ambassador Page, agreed to place at my disposal every facility for studying mental and nervous diseases. The medical officers of the special hospitals for mental and nervous cases, through the courtesy of Sir Alfred Keogh, Director General of the Royal Army Medical Corps, gave me opportunities to observe the work of the institutions under their charge. Others actively engaged in dealing with various administrative and clinical phases of these problems not only gave me valuable information but very kindly offered suggestions as to practical means by which our army might profit by the experience of British medical officers. I would mention especially Lt. Colonel William Aldren Turner, the principal advisor to the government in these matters; Lt. Colonel Sir John Collie, President of the Special Pension Board on Neurasthenics; Sir William Osler, under whose direction work is carried on in the special hospital for functional disorders of the heart; Dr. C. Herbert Bond of the Board of Control; Dr. Henry Head, who represented the Medical Research Committee in the conference upon nervous diseases among soldiers, held in Paris in April, 1916; Dr. H. Crichton Brown who has prepared a thoughtful memorandum on the subject for the War Office; Lt. Colonel Sir Robert Armstrong-Jones and the American liaison officers in London—Brigadier General Bradley and Lt. Colonel Lyster of the army and Surgeon Pleadwell of the navy. Dr. William Morley Fletcher, Secretary of the Medical Research Committee, which from an early period in the war has directed attention to the importance of nervous diseases, presented me with a motion picture film showing some of the more common symptoms in soldiers suffering from the neuroses. Dr. John T. MacCurdy, Associate in Psychiatry at the New York State Psychiatric Institute, who was studying the war neuroses in special hospitals in London, very kindly visited the Moss Side Military Hospital at Maghull and the Craiglockhart Hospital for officers, near Edinboro, and furnished me with reports on the facilities for treatment at these institutions.

It is impossible to examine closely any phase of the work of caring for disabled soldiers in Great Britain without being profoundly impressed with the high degree of executive and scientific skill with which the unprecedented medical problems of the war have been met. More than twice as many hospital beds have been provided for soldiers and sailors as existed in the whole United Kingdom in August, 1914, for the civil population. In the stress of war, with all difficulties immensely increased, special types of treatment have been provided which the most enlightened civil communities had not yet been able to supply in time of peace. These almost incredible achievements were made possible by the patriotic efforts with which the nation disposed of obstacles in every direction. Beneath all this work is the deep sympathy which officials and the public alike bestow upon all those returning from the front who are in need of care or attention.

Scope of Report

I have omitted entirely from this report any account of the treatment of organic nervous diseases and of injuries to the central nervous system or the peripheral nerves. Organic nervous diseases are not especially frequent and seem to present no special military problems. Injuries of the central nervous system are frequent and severe. Those that do not prove fatal very quickly are well cared for at first in general surgical wards where the services of neurologists and neurological surgeons are available and later in special hospitals or special hospital wards. A very serious difficulty in dealing with destructive brain and cord lesions is that the patients sooner or later pass from hospitals in which special care and nursing are provided to their homes or to poorly equipped auxiliary hospitals in which many soon get worse or die. Injuries to the peripheral nerves are frequent and important, in fact there are few extensive injuries to the extremities in which important nerves escape. With neurological advice, the surgeons deal with these cases successfully in the base hospitals and their after-treatment is well carried on in the "reconstruction centers" for orthopedic cases. Neither of these classes of injuries concerns us especially in a consideration of the treatment and military management of mental and functional nervous diseases, except for the fact (to be commented upon later) that the treatment of the war neuroses might be carried out advantageously in home territory in co-operation with orthopedic reconstruction centers.

Although the problems presented by mental and functional nervous diseases have many clinical and administrative features in common and although these disorders should be dealt with by medical officers with the same kind of special training, it seems desirable to consider their treatment in England separately in this report.

My observations as to the nature of the neuroses met with in war are based partly upon a study of the very extensive literature upon this subject which has come into existence since the commencement of the war, but chiefly upon personal conversation with medical men engaged in treating these cases in England. It is almost needless to say that during a short period spent largely in securing information regarding facilities for treatment and administrative methods of management and in examining special hospitals for the care of these cases, I had no opportunity to make original clinical observations, although I saw and examined superficially many cases of all degrees of severity.

WAR NEUROSES ("SHELL SHOCK")

Although an excessive incidence of mental diseases has been noted in all recent wars, it is only in the present one that functional nervous diseases have constituted a major medico-military problem. As every nation and race engaged is suffering severely from these disorders, it is apparent that new conditions of warfare are chiefly responsible for their prevalence. None of these new conditions is more terrible than the sustained shell fire with high explosives which has characterized most of the fighting. It is not surprising, therefore, that the term "shell shock" should have come into general use to designate this group of disorders. The vivid, terse name quickly became popular and now it is applied to practically any nervous symptoms in soldiers exposed to shell fire that cannot be explained by some obvious physical injury. It is used so very loosely that it is applied not only to all functional nervous diseases but to well-known forms of mental disease, even general paresis. Such a situation is most unsatisfactory and at the present time an attempt is being made to improve the nomenclature of the nervous disorders of war.

Discussion of clinical features of the war neuroses is not within the scope of this report, which deals with treatment and military management.* It is impossible, however, even to define the

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*These extraordinarily interesting medical problems of the war are dealt with in a rapidly expanding volume of special literature. The July number of MENTAL HYGIENE (Vol. I, No. 3) contains a résumé of this literature. One hundred and forty-one references in English are given in an appendix of this report. (See footnote, page 509.) Attention is directed particularly to the contributions of Major Frederick M. Mott, Professor G. Elliot Smith, Captain CharlesS. Myers, Captain Clarence B. Farrar, Captain M. D. Eder and also to the extensive report by Dr. John T. MacCurdy in the *Psychiatric Bulletin* (N. Y.) for July, 1917.

problem with which we are dealing without a few general observations on the nature of the disorders which are grouped under the name "shell shock".

The subject can be clarified a little by dividing the different conditions so designated into some clinical and etiological groups. First should be considered cases in which the patients have been actually exposed to the effects of high explosives.

1. Not infrequently, just how often it is impossible to say, exploding shells or mines cause death without external signs of injury. Apparently death in these cases is sometimes due to damage to the central nervous system.

2. In another group of cases severe neurological symptoms follow burial or concussion by explosions in characteristic syndromes suggesting the operation of mechanical factors. The studies of Major Mott indicate that concussion, aerial compression and the rapid decompression following it, "gassing" from the drift gases (carbon monoxide and oxides of nitrogen) generated by the explosion and other purely mechanical effects of shell explosion may result in transitory or permanent neurological symptoms of a type unfamiliar in the neuroses.

There can be no question of the propriety of supplying the term "shell shock" to these two groups of cases if a specific term is required.

3. Another group of cases, among those exposed to shell fire, includes patients in whom, while there may or may not be damage to the central nervous system, the symptoms are those of neuroses familiar in civil practice even though colored in a very distinctive way by the precipitating cause. In this group of cases, in which there is possibility but no proof of damage to the central nervous system, the symptoms present which might be attributable to such damage are quite overshadowed by those characteristic of the neuroses.

It is about these cases that much controversy exists. Mott includes them in his group of "injuries of the central nervous system without visible injury," holding that a physical or a chemical change at present unknown to us must underlie such striking disabilities. Others give less weight to the factor of physical damage and yet recognize its existence and reconcile the wide range of neurotic symptoms with the very minute amount of damage which may exist by terming these cases "traumatic neuroses." Others again feel that psychogenetic factors determine not only the continuing neurosis but even the initial unconsciousness and special sense disturbances.

4. There is a group of cases in which even the slightest damage to the central nervous system from the direct effects of explosions is exceedingly improbable, the patients being exposed only to conditions to which hundreds of their com-

rades who develop no symptoms are exposed. In these cases the symptoms, course and outcome correspond with those of the neuroses in civil practice.

If all neuroses among soldiers were included in these groups the use of the term "shell shock" might be defended. But many hundreds of soldiers who have not been exposed to battle conditions at all develop symptoms almost identical with those in men whose nervous disorders are attributed to shell fire. The non-expeditionary forces supply a considerable proportion of these cases.

To state that, in the cases included in the last two groups of cases in which shell explosions play a part, the mechanism is that of a neurosis by no means excludes the operation of physical causes. Very little is known, however, regarding the physiological basis of the disorders in this group or even in those in the first two groups in which the issues are apparently predominantly organic. It may be that in the latter two groups endocrinitic disturbances are important. Minute injuries of the cord may exist and factors such as exposure, exhaustion, vascular disequilibrium and disorders of metabolism may enter into their causation. Treatment directed along the lines suggested by such an etiology has thus far proved quite ineffective, however, and there is only the most slender basis of experimental work to show that such factors are important. This is a fertile field for research. It is earnestly hoped by all those consulted in England that the United States Army, coming freshly into contact with this problem, will organize a working party of psychiatrists, neurologists, neuro-pathologists and internists and try to clear some of these issues.

It is the opinion of most psychiatrists and neurologists who have been studying and treating "shell shock" in the British Army that the fourth group is the largest and most important and that, whatever the unknown physiological basis, psychological factors are too obvious and too important in these cases to be ignored. In support of this view there is much evidence, some of which it may be worth while to give.

1. The striking excess of war neuroses among officers. The ratio of officers to men at the front is approximately 1:30. Among the wounded it is 1:24.* *Among the patients admitted to the special hospitals for war neuroses in England during the year ending April 30, 1917, it was 1: 6.*

2. The rarity of war neuroses among prisoners exposed to mechanical shock.

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*Analysis of 381,983 casualties between August 4, 1914 and August 21, 1915, reported in a statement in Parliament, and 901,534 casualties between July, 1916 and July, 1917.

3. The rarity of war neuroses among the wounded exposed to mechanical shock.
4. The clinical resemblance which the war neuroses bear to the neuroses of civil life in which the element of mechanical shock is lacking while the psychological situations are somewhat alike.
5. The fact that severe war injuries to the brain and spinal cord are not accompanied by symptoms similar to those in "shell shock," in which injuries of less degree are assumed.
6. The success attending therapeutic measures employed with reference to the psychological situations discovered in individual cases.

These suggestive facts require some elaboration. The high prevalence of "shell shock" among officers corresponds with the distribution of the neuroses, with reference to education and social grouping, in civil life. Soldiers who are wounded and those who are taken prisoners in battle are exposed to wind concussion and rapid decompression and other mechanical factors in the same degree as their comrades who suffer from neuroses. One must conclude from the fact that they escape that being wounded or being captured provides them with something which the neurosis provides for others. The symptoms exhibited usually bear a more direct relation to the existing psychological situation than they could possibly bear to the localization of a neurological injury. Thus a soldier who bayonets an enemy in the face develops an hysterical tic of his own facial muscles; abdominal contractures occur in men who have bayonetted enemies in the abdomen; hysterical blindness follows particularly horrible sights; hysterical deafness appears in those who find the cries of the wounded unbearable and men detailed to burial parties develop anosmia.

The psychological basis of the war neuroses (like that of the neuroses in civil life) is an elaboration, with endless variations, of one central theme: escape from an intolerable situation in real life to one made tolerable by the neurosis. The conditions which may make intolerable the situation in which a soldier finds himself hardly need stating. Not only fear, which exists at some time in nearly all soldiers and in many is constantly present, but horror, revulsion against the ghastly duties which must be sometimes performed, intense longing for home, particularly in married men, emotional situations resulting from the interplay of personal conflicts and military conditions, all play their part in making an escape of some sort mandatory. Death provides a means which cannot be sought consciously. Flight or desertion is rendered impossible by ideals of duty, patriotism, and honor, by the reactions acquired by training or imposed by discipline and by herd reactions. Malingering is a military crime and is not at the disposal of those governed by higher ethical conceptions. Nevertheless, the conflict between a simple and direct expression in flight of the instinct of self-preservation and such factors demands some sort of compromise. Wounds solve the problem most happily for many men and the mild exhilaration so often seen among the wounded has a sound psychological basis. Others with a sufficient adaptability find a means of adjustment. The neurosis provides a means of escape so convenient that the real source of wonder is not that it should play such an important part in military life but that so many men should find a satisfactory adjustment without its intervention. The constitutionally neurotic, having most readily at their disposal the mechanism of functional nervous diseases, employ it most frequently. They constitute, therefore, a large proportion of all cases but a very striking fact in the present war is the number of men of apparently normal mental make-up who develop war neuroses in the face of the unprecedentedly terrible conditions to which they are exposed.

One of the chief objections to the use of the term "shell shock" is the implication it conveys of a cause acting instantly. The train of causes which leads to the neurosis that an explosion ushers in is often long and complicated. Apparently in many military cases mental conflicts in the personal life of the soldier that are not directly connected with military situations influence the onset of the neuroses. Thus men who have been doing very well in adapting themselves to war develop "shell shock" immediately after receiving word that their wives have gone away with other men during their absence.

Approached from the psychological viewpoint, the symptoms in the war neuroses lose much of their weird and inexplicable character. Most of them can be summed up in the statement that the soldier loses a function that either is necessary to continued military service or prevents his successful adaptation to war. The symptoms are found in widely separated fields. Disturbances of psychic functions include delirium, confusion, amnesia, hallucinations, terrifying battle dreams, anxiety states. The disturbances of involuntary functions include functional heart disorders, low blood pressure, vomiting and diarrhea, enuresis, retention or polyuria, dyspnoea, sweating. Disturbances of voluntary muscular functions include paralyses, tics, tremors, gait disturbances, contractures and convulsive movements. Special senses may be affected producing pains and anesthesias, mutism, deafness, hyperacusis, blindness and disorders of speech. It is highly significant that, in this unprecedented prevalence of functional nervous diseases among soldiers, no symptoms unfamiliar to those who see the neuroses in civil life present themselves.

In all of these the soldier is afflicted with more or less incapacity without obvious expansion. This is a condition involving grave dangers. His condition is degrading and is often rendered more so by the punishment or ridicule to which he is subjected. For this reason, immediately after the onset of the symptoms of the neurosis, the patient passes through a very critical period. Improper management may add to the primary neurological disability—which is largely beyond our power of preventing—secondary effects which go even further in producing nervous invalidism. Long-continued treatment in general hospitals, confusion of the neurosis present with the organic nervous diseases, and unintelligent management, all tend to produce the chronic "shell shock" cases which are so familiar in the special hospitals for these disorders. Symptoms which were at one time quite easily removable become fixed and refractory or new ones are constantly produced. The mental attitude—the patient's morale as a soldier and his attitude toward his disorder—reaches a very low level, will is seriously impaired and a chronic invalid replaces a temporarily incapacitated soldier. These are matters in the realm of clinical psychiatry and psycho-pathology and are outside the scope of this report. Space is given to them here only because of their very important bearing upon treatment and military management.

Prevalence

The medical statistics of the war are as yet untabulated. Even if the records contained the information desired it would be very difficult to state the prevalence of the neuroses on account of the defective nomenclature employed. It is doubtful if there is another group of diseases in which more confusion in terms exists. Nervous or mental symptoms coming to attention after the soldier has been exposed to severe shell fire, are almost certain to be diagnosed as "shell shock," and yet when such patients are received in England, well-defined cases of general paresis, epilepsy or dementia praecox are often found among them. This source of confusion tends to swell the number of cases reported under the term "shell shock," but there are many other sources of error which tend to diminish the apparent prevalence of the war neuroses. Chief among these is reporting the neuroses under the name of the most prominent somatic symptom. The largest group of cases in which this is done is made up of patients diagnosed officially as having disordered action of the heart ("D. A. H."). Where the only symptoms are cardio-vascular ones of neurotic origin, a legitimate question of medical nomenclature exists, but one sees in the wards or hospitals given over to functional heart disorders, patients with hysterical paralyses, tics, tremors, mutism, anxiety states and other severe neurotic symptoms. Another source of error is the practice, made mandatory by a recent order, of returning these cases (when occurring in soldiers engaged in actual fighting) as "injuries received in action."

With a view to discovering the prevalence of the neuroses and insanity, Sir John Collie, President of the Special Pension Board on Neurasthenics, made an analysis of 10,000 discharge certificates for disability, interpreting the diagnoses given in the light of his very large experience. He found that of these 10,000 consecutive cases, the neuroses constituted 20 per cent.

The number of cases treated in the special hospitals in England gives some idea of the prevalence of these disorders, but the fact that the number of troops in the expeditionary and the non-expeditionary forces is confidential, makes it impossible to give the rates for the two great divisions of the British Army. During the year ending April 30, 1916, approximately 1,300 officers and 10,000 men were admitted to the special hospitals for "shell shock" and neurasthenics in Great Britain. The 1,800 beds in these special hospitals constitute less than half the total provisions in Great Britain for such cases, as neurological departments exist in the large territorial general hospitals and in the Royal Victoria Hospital in Edinboro. Moreover, a constantly increasing number of these cases are being treated in France. The recoveries in the hospitals there diminish, to an unknown degree, the number of cases received in the hospitals in Great Britain. It is the belief of those who have made an effort to ascertain the prevalence of the war neuroses, that the rate among the expeditionary forces is not less than ten per thousand annually, and among the home forces not less than three per thousand.

Treatment

General arrangements. When soldiers suffering from functional nervous disorders began to arrive in England from the expeditionary forces in September, 1914, no special civil or military hospitals existed for their reception. In the case of mental diseases it was an easy task to convert "D Block" at the Royal Victoria Hospital into a clearing hospital and to utilize civil institutions for the insane for continued care, but in England, as in the United States, there are no public civil hospitals that are engaged exclusively in the work of treating the neuroses. The special civil hospitals for organic nervous diseases were soon filled with patients suffering from severe neurological injuries and were able to do very little on behalf of those with functional nervous disorders.

For a short time it was necessary to care for all such cases in general military hospitals for medical and surgical conditions. The rapid increase in the number of such cases during October and November, 1914, led to the detail of a special medical officer to ascertain their special needs and to prepare a plan for meeting them. The recommendations of this officer that special institutions be provided for functional nervous diseases was approved and when, in December, 1914, the Moss Side State Institution at Maghull was turned over to the War Office, the first military hospital for functional nervous diseases was available. This institution was particularly suitable for this purpose. It had been completed but not opened for the care of mental defectives of the delinquent type and consisted of detached villas accommodating 347 patients. The number of these patients was so great, however, that general hospitals were still called upon to deal with them. The establishment of neurological departments in these hospitals partly met the situation until additional special hospitals could be provided. The second such hospital was secured by using a detached portion of Middlesex County Asylum in London. This hospital, accommodating 278 additional patients, was renamed the Springfield War Hospital. The foresight of Sir Alfred Keogh and his advisors thus enabled England to make provision for these cases in special military hospitals at an early period in the war.

With more than one hospital available, it was possible to make different provisions for different classes of patients suffering from war neuroses. A clearing hospital was therefore established early in 1915 at the Fourth London Territorial General Hospital where the best disposition could be determined. The Maudsley Hospital, a psychopathic hospital for the County of London, was nearing completion at this time and, as it adjoined the Kings College Hospital which formed the larger part of the Fourth London Hospital, it was utilized as a nucleus for this clearing station. The Maudsley Hospital accommodates 175 men and 20 officers; the neurological section—"the Maudsley extension"—accommodates 450 men and 80 officers. Thus by the spring of 1915, England was provided with a clearing hospital for war neuroses and two special institutions for their continued care. Notwithstanding this provision, by far the greater number of cases were cared for in general hospitals in England and no special provision for continued treatment existed in France. The disadvantages of attempting to treat functional nervous disorders in general hospitals were very apparent and so neurological sections were established in territorial general hospitals in England, Scotland and Wales and in the Royal Victoria Hospital at Netley. Other special hospitals have been provided since, a directory and descriptions of those visited being given in Appendix III.*

When the submarines commenced to sink hospital ships indiscriminately last year a great deal of the medical work previously done in England was undertaken in France and so special provisions for functional nervous cases were made at Havre, Ireport, Boulogne, Rouen and Étaples. Formerly little more than establishing the diagnosis was done in France. It is likely that the work of caring for these cases will be turned over more and more to the special hospitals in France as the results of treatment there have been, on the whole, so much more successful than in home territory.

A recent extension of treatment is that of providing care still nearer the front. The striking results obtained in Casualty Clearing Stations and similar advanced posts in the French Sanitary Service (*postes de chirurgie d'urgence*) are confirmed by many observers.

Capt. William Brown, a psychiatrist, who has recently had the opportunity of working in a Casualty Clearing Station of the British Expeditionary Forces,

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*An interesting account of the arrangements for the care of soldiers with war neuroses is given in a special article by Lt. Col. William Aldren Turner (*Lancet*, London, May 27, 1916, pp. 1073-1075).

reports that of 200 nervous and mental cases which passed through his hands in December, 1916, 34 per cent were evacuated to the base after seven days' treatment and 66 per cent returned to duty on the firing line after the same average period of treatment. Four of these cases reappeared at the same Casualty Clearing Station.

Capt. Louis Casamajor of the U. S. Army, neurologist to Base Hospital No. 1, British Expeditionary Force, says in a recent letter: "It is a mistake to send these cases to England. We need an intermediate step between the general hospital and the convalescent camp. Of course they never should get into general hospitals at all but should be sent from Casualty Clearing Stations direct to neuro-psychiatric hospitals. . . . I hope our army will have a psychiatrist in each Casualty Clearing Station to weed these cases out and send them to their proper places and not have them knock around from one general hospital to another, being pampered into hard-set neuroses."

Léri, working in the neuro-psychiatric center of the second French Army, reports that 91 per cent of the cases received from July to October, 1916, were returned to the fighting line. Marie reports that the neuroses are less frequently met with in Paris now that they are treated immediately upon their appearance in the Army neuro-psychiatric centers.*

Major Frederick W. Mott says: "I regard this matter of preventing the fixation of a functional paralysis as of supreme importance both in respect to the welfare of the individual and from the economic point of view of the state."

Roussy and Boisseau,† describing the work of an army neuro-psychiatric center say: "The results obtained after six months show that a neuro-psychiatric center can render incontestable services to an army both from a medical and a military point of view. For functional nervous cases it avoids sojourns (more dangerous the more they are prolonged) in the hospitals at the rear where these patients are generally lost. It allows of the treatment of other nervous or mental cases that are quickly curable and the direct evacuation to the special centers in the interior of those more seriously affected."

Captain C. B. Farrar‡ says: "Moreover it seems to be a fact that treatment is more satisfactorily carried out and cures more speedily accomplished in hospitals close to the front and where the spirit of army discipline is most felt. It is conceded that the worst possible place to treat a case of war neurosis is in his home town, where in so far especially as the more striking objective symptoms are concerned, the sympathetic wonderment and commiseration of friends create a positive demand which the ideogenic factor of the patient's illness continues faithfully to supply. In hospitals close behind the lines there is still the atmosphere of the front and a mental tone which comes from mass-suggestion of men striving shoulder to shoulder. This mental tone is eminently supportive and therapeutic, but with the transfer of patients to interior hospitals far behind the lines it naturally gives way. The circumstances which produce it are no longer operative and the nervous relaxation and reaction which ensue are often conspicuously and painfully evident. Out of danger, far from the front, perhaps among hero-worshipping friends, the invalid is unavoidably conscious of himself more

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Revue neurologique (Nov.-Dec., 1916).

†*Paris médicale*, 1: 14-20 (Jan. 1, 1916).

‡*American journal of insanity*, 73: 711-712 (April, 1917).

as an individual and less as a link in the battle line. All the conditions are favorable for the fixation and reinforcement of the neurosis as an ideogenic process. Too often he is found to be the victim not only of his malady, but of his friends as well, and in more senses than one."

General principles. Methods of treatment employed in different special hospitals are described in Appendix III. With so much regarding the war neuroses the subject of controversy, it is not surprising that different methods of treatment have come into existence. The Royal Army Medical Corps has seen fit to leave these matters largely to the specialists in charge of the different hospitals and so the treatment in each reflects, to a certain degree, the conception of the nature of war neuroses held by the medical officer in charge. Certain general principles regarding treatment may be stated.

The experience of the British "shell shock" hospitals emphasizes the fact that the treatment of the war neuroses is essentially a problem in psychological medicine. While patients with severe symptoms of long duration recover in the hands of physicians who see but dimly the mechanism of their disease and are unaware of the means by which recovery actually takes place, no credit belongs to the physician in such cases and but little to the type of environment provided. In the great majority of instances the completeness, promptness and durability of recovery depend upon the insight shown by the medical officers under whose charge the soldiers come and their resourcefulness and skill in applying treatment.

The first step in treatment is a careful study of the individual case. There are no specific formulae for the cure of mutism, paralyses or tremors or other manifestations of war neuroses. These are symptoms and the patient must be treated as well as his symptoms. As in all other psychiatric work, efforts must first be made to gain an understanding of the personality—the fabric of the individual in whom the neurosis has developed. His resources and limitations in mental adaptation will determine in a large measure, the specific line of management. The military situation is most striking but the problem which life in general presents to the individual and the type of adaptation which he has found serviceable in other emergencies are of as much importance as the specific causes for failure in the existing situation. The disorder must be looked at as a whole. The incident which seems to have precipitated the neurosis—whether shell explosion, burial or disciplinary crisis—must receive close attention but not to the exclusion of other factors less dramatic but often more potent in the production of the neurosis. It has often been said that some of the symptoms of hysteria are the work of the physician and are created—not disclosed—by neurological examinations. This is apparently true, but the question whether analgesia can exist until the pin prick demonstrates it is somewhat like the question whether sound can exist without an ear to receive it. It is not only true, but a fact of great practical importance, that a skilful, searching, psychological examination often constitutes the first step in actual treatment.

In the analysis of the situation, as well as in the subsequent management of the patient, the medical officer's attitude is of much importance. He must be immune to surprise or chagrin. Although understanding sympathy is nearly as useful as misdirected sympathy is harmful, he must always remain in firm control.

The resources at the disposal of the physician in treating the war neuroses are varied. The patient must be re-educated in will, thought, feeling and function. Persuasion, a powerful resource, may be employed, directly backed by knowledge on the part of the patient as well as the physician of the mechanism of the particular disorder present. Indirectly, it must pervade the atmosphere of the special ward or hospital for "shell shock". Hypnotism is valuable as an adjunct to persuasion and as a means of convincing the patient that no organic disease or injury is responsible for his loss of function. Thus in mutism the patient speaks under hypnosis or through hypnotic suggestion and thereafter must admit the integrity of his organs of speech. The striking results of hypnotism in the removal of symptoms are somewhat offset by the fact that the most suggestible who yield to it most readily are particularly likely to be the constitutionally neurotic. A mental mechanism similar to that which produced the disorder is being used in such cases to bring about a cure.

Recovery within the sound of artillery or at least "somewhere in France" is more prompt and durable than that which takes place in England. For severe cases and those which through mismanagement have developed the unfortunate secondary symptoms of "shell shock" and in whom long-continued treatment is necessary, a rural place is best.

Re-education by physical means is a valuable adjunct to treatment in recent cases but particularly in chronic cases who have been mismanaged and in those who are recovering from long continued paralyses, tics, mutism and gait disorders. While drills and physical exercises have their specific uses, occupation is the best means. Non-productive occupations should be avoided.

Occupations are conveniently classified as:

1. Bed.
2. Indoor.
3. Outdoor.

1. Basket-making and net-making are good bed occupations for cases with extensive paralyses, as are making surgical dressings and various minor finishing operations (sandpapering, polishing, etc.) on products of the shops. All occupations, and especially those which are carried on by patients seriously incapacitated, should be regarded as only steps in a process of progressive education. Every effort must be made to prevent skill acquired in them from being considered as a substitute for full functional activity. Herein is an important difference between the "re-education" of neurotic and orthopedic cases. In the latter the purpose is often to make the remaining sound limb take on the functions of one which is missing or permanently disabled. *The function held in abeyance through neurotic symptoms must never be looked upon as lost.* It can and must be restored and if another function is developed as its surrogate the day of full recovery is thereby postponed. Bed occupations, therefore, must always be regarded as the first steps in a series which is to culminate in full activity. Progress through achievements constantly more difficult is the keynote of re-education in the war neuroses.

2. A wide variety of indoor occupations should be provided including at the minimum carpentry, wood carving, metal work and cement work. Printing, bookbinding, cigarette making, electric wiring and other work should be added as opportunities permit.

3. Farming, gardening and building operations are desirable outdoor occupations. Where possible, wood sawing and chopping are very desirable as is the care of stock not requiring much land (squabs, guinea pigs, rabbits, game, frogs).

Before even the simplest occupation can be engaged in it is sometimes necessary to re-educate paraplegics and ataxics in walking and co-ordination. Just as soon as possible, exercises should be replaced by productive occupations which will accomplish the same results more quickly and more satisfactorily. The same is true of gymnastic exercises which in the early steps of treatment constitute a valuable resource but which should be replaced by specially devised, useful tasks. Swimming has a unique place in the treatment of gait disturbances, paralyses and tics. One of the first pieces of construction undertaken by the outdoor patients at a reconstruction center should be that of building a large concrete swimming tank.

Hydrotherapy and electrotherapy have a distinct value when they are applied with absolute sincerity and full realization on the part of patient and medical officer of the rôle which they actually play in the treatment of functional nervous diseases.

The experience in English hospitals has demonstrated the great danger of aimless lounging, too many entertainments and relaxing recreations such as frequent motor rides, etc. It must be remembered that "shell shock" cases suffer from a disorder of will as well as function and it is impossible to effect a cure if attention is directed to one at the expense of the other. As Dr. H. Crichton Miller has put it, "'shell shock' produces a condition which is essentially childish and infantile in its nature. Rest in bed and simple encouragement is not enough to educate a child. Progressive daily achievement is the only way whereby manhood and self-respect can be regained."

Outcome

It was impossible for me to discover the end-results of treatment. The following table shows the disposal of 731 discharges from the Red Cross Military Hospital at Maghull during the year ending June 30, 1917.

	Number	*Per cent*
To military duty	153	20.9
To civil life	476	65.1
To other hospitals	88	12.0
To civil institutions for the insane	7	1.0
Died	3	0.4
Deserted	4	0.6
	731	100.0

It is the opinion of the commanding officer of this hospital that few men (with the severe or chronic types of neuroses there received) can be sent back to military duty at the front. More could be returned to duty at the base but for the fact that after having been in a "shell shock hospital," they are regarded as being poor material and little effort is taken to train them for their new duties. Under such conditions the men become discouraged and soon show signs of relapse. Those discharged to civil life have done satisfactorily—as might be expected when one bears in mind the genesis of the neuroses in war.

At the Granville Canadian Special Hospital at Ramsgate, upwards of 60 per cent of the patients admitted were returned to the front. The experience of this hospital is of special value to us because the cases treated are those which seem likely to recover within six months. All others and those who do not improve quickly at Ramsgate are sent to Canada. It would be wise for the United States Army to adopt a similar policy.

In the special wards established in France the recoveries are still more numerous.*

It is evident that the outcome in the war neuroses is good from a medical point of view and poor from a military point of view. It is the opinion of all those consulted that, with the end of the war, most cases, even the most severe, will speedily recover, those who do not being the constitutionally neurotic and patients who have been so badly managed that very unfavorable habit-reactions have developed. This cheering fact brings little consolation however, to those who are chiefly concerned with the wastage of fighting men. The lesson to be learned from the British results seems clear—that treatment by medical officers with special training in psychiatry should be made available just as near the front as military exigency will permit and that patients who cannot be reached at this point should be treated in special hospitals in France until it is apparent that they cannot be returned to the firing lines. *As soon as this fact is established military needs and humanitarian ends coincide.* Patients should then be sent home as soon as possible. The military commander may have the satisfaction of knowing that food need not be brought across to feed a soldier who can render no useful military service, and the medical officer may feel that his patient will have what he most needs for his recovery—home and safety and an environment in which he can readjust.

Looking at the matter from a military point of view alone, one might ask whether it is not desirable to send home all "shell shock" cases—in whom so much effort results in so few recoveries. Such a decision would be as unfortunate from a military as from a humanitarian standpoint. Its immediate effect would be to increase enormously the prevalence of the war neuroses. In the unending conflict between duty, honor and discipline, on the one hand, and homesickness, horror, and the urgings of the instinct of self-preservation on the other, the neurosis—as a way out—is already accessible enough in most men without calling attention to it and enhancing its value by the adoption of such an administrative policy.

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* Pp. 520, 521.

Medico-legal Relations

The sudden appearance of marked incapacity, without signs of injury, in a group of men to whom invalidism means a sudden transition from extreme danger and hardship to safety and comfort, quite naturally gives rise to the suspicion of malingering. The general knowledge among troops of the more common symptoms of "shell shock" and of the fact that thousands of their comrades suffering from it have been discharged from the army suggests its simulation to men who are planning an easy exit from military service by feigning disease. It is therefore of much military importance that medical officers be not deceived by such frauds. On the other hand, especially before the clinical characters and remarkable prevalence of war neuroses among soldiers had become familiar facts, not a few soldiers suffering from these disorders were executed by firing squads as malingerers. Instances are also known where hysterics have committed suicide after having been falsely accused of malingering. Mistakes of this kind are especially likely to occur when the patients have not been actually exposed to shell fire on account of the idea so firmly fixed in the minds of most line officers and some medical men that the war neuroses are always due to mechanical shock.

The diagnosis between neuroses and malingering may sometimes be extremely difficult but usually it is easy when the examiner is familiar with both conditions. The difficulties arise from the fact that in both, a disease or a symptom is simulated. As Bonnal says, "The hysteric is a malingerer who does not lie." The cardinal point of difference is that the *malingerer simulates a disease or a symptom which he has not in order to deceive others.* He does this consciously to attain, through fraud, a specific selfish end—usually safety in a hospital or discharge from the military service. He lies and *knows* that he lies. *The hysteric deceives himself by a mechanism of which he is unaware and which is beyond his power consciously to control.* He is usually not aware of the precise purpose which his illness serves. This is shown by the fact that, in many cases, all that is necessary for recovery is to demonstrate clearly to the patient the mechanism by which this disability occurred and the unworthy end to which, unconsciously, it was directed.

There are a number of distinctive points of difference between hysteria and malingering, two of which it may be interesting to mention.

The malingerer, conscious of his fraudulent intent and fearful of its detection, dreads examinations. The hysteric invites examinations, as is well known to physicians in civil practice. When he has the opportunity he makes the rounds of clinics and physicians, especially delighting in examinations by noted specialists.

The hysteric, in addition to the symptoms of which he complains, often presents objective symptoms of which he is unaware. The malingerer, unless of low intelligence, confines his complaints to the disease or symptom which he has decided to simulate.

Malingering may follow or prolong a neurosis. This is not infrequently the case when mutism is succeeded by aphonia. In such cases the clinical picture presents changes very apparent to the experienced psychiatrist but it must be remembered that malingerers (like criminals in civil life) are often very neuropathic individuals.

The gravity of malingering as a military offense in an army in the field justifies the recommendation that no case in which the possibility of a neurosis or psychosis exists shall be finally dealt with until the subject is examined by a neurologist or psychiatrist. If neuro-psychiatric wards are provided in base hospitals in France as well as in the United States, such an examination will be feasible in practically all cases without causing undue delay. The knowledge that malingerers are subjected to expert examinations always tends to discourage soldiers from this practice.

RECOMMENDATIONS FOR THE UNITED STATES ARMY

The following recommendations for the treatment of mental diseases and war neuroses ("shell shock") in United States troops are based chiefly upon the experience of the British Army in dealing with these disorders, as outlined in the foregoing report. The advice of British medical officers engaged in this special work has aided greatly in formulating the plans presented. At the same time conditions imposed by the necessity of conducting our military operations three thousand miles away from home territory have been borne in mind.

It seems desirable to consider separately in these recommendations, expeditionary and non-expeditionary forces. It is necessary to deal separately with mental and nervous diseases in the United States but not in France. While facilities existing at home can be utilized for the treatment of mental diseases it is necessary to create new ones for the treatment of the war neuroses. In France, where all facilities for treatment must be created by the medical department, the distinction between psychoses and neuroses need not be drawn so closely. Consequently, simpler and more effective methods of administrative management can be devised.

The importance of providing, in advance of their urgent need, adequate facilities for the treatment and management of nervous and mental disorders can hardly be overstated. The European countries at war had made practically no such preparations and they fell into difficulties from which they are now only commencing to extricate themselves. We can profit by their experience and, if we choose, have at our disposal, before we begin to sustain these types of casualties in very large numbers, a personnel of specially-trained medical officers, nurses and civilian assistants and an efficient mechanism for treating mental and nervous disorders in France, evacuating them to home territory and continuing their treatment, when necessary, in the United States.

Although it might be considered more appropriately under the heading of prevention than under that of treatment, the most important recommendation to be made is that of rigidly excluding insane, feebleminded, psychopathic and neuropathic individuals from the forces which are to be sent to France and exposed to the terrific stress of modern war. Not only the medical officers but the line officers interviewed in England emphasized, over and over again, the importance of not accepting mentally unstable recruits for military service at the front. If the period of training at the concentration camps is used for observation and examination, it is within our power to reduce very materially the difficult problem of caring for mental and nervous cases in France, increase the military efficiency of the expeditionary forces and save the country millions of dollars in pensions. Sir William Osler, who has had a large experience in the selection of recruits for the British Army and has seen the disastrous results of carelessness in this respect, feels so strongly on the subject that he has recently made his views known in a letter to the *Journal of the American Medical Association** in which he mentions neuropathic make-up as one of the three great causes for the invariable rejection of recruits. In personal conversation he gave numerous illustrations of the burden which the acceptance of neurotic recruits had unnecessarily thrown upon an army struggling to surmount the difficult medical problems inseparable from the war.

It is most convenient to summarize the recommendations as follows and then to discuss each one somewhat in detail:

SUMMARY OF RECOMMENDATIONS FOR THE CARE AND TREATMENT OF MENTAL DISEASES AND WAR NEUROSES ("SHELL SHOCK") IN THE EXPEDITIONARY FORCES

OVERSEAS

1. *Base Section of Lines of Communication*
    - (a) A Special Base Hospital of 500 beds for neuro-psychiatric cases, located at the base upon which each army (of 500,000–600,000) rests. These special base hospitals to be used for cases likely to recover and return to active duty within six months. Other cases to be cared for while waiting to be evacuated to the United States.
    - (b) One or more Special Convalescent Camps in connection with (and conducted as part of) each Special Base Hospital.
2. *Advanced Section of Lines of Communication*
    - (a) Special Neuro-Psychiatric Wards of 30 beds in charge of three psychiatrists and neurologists for each base hospital having an active service. These wards to be used for observation (including medico-legal cases) and for emergency treatment of mental and nervous cases.
    - (b) Detail of a psychiatrist or neurologist attached to the neuro-psychiatric wards of base hospitals, to evacuation hospitals or stations further advanced as opportunities permit.

UNITED STATES

1. *Mental Diseases (insane)*
    - (a) One or more Clearing Hospitals for reception, emergency treatment, classification and disposition of mental cases among enlisted men invalided home.
    - (b) Clearing Wards (in connection with general hospitals for officers or private institutions for mental diseases) for reception, emergency treatment, classification and disposition of mental cases among officers invalided home.
    - (c) Legislation permitting the Surgeon-General to make contracts with public and private hospitals maintaining satisfactory standards of treatment for the continued care of officers and men suffering from mental diseases until recommended for retirement or discharge (with or without pension) by a special board.

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(d) Appointment of a special board of three medical officers to visit all institutions in which insane officers and men are cared for under such contracts to see that adequate treatment is being given and to retire or discharge (with or without pension) those not likely to recover.

2. *War Neuroses* ("*shell shock*")
    (a) Re-construction centers (the number and capacity to be determined by the need) for the treatment and re-education of such cases of war neuroses as are invalided home. Injuries to the brain, cord and peripheral nerves to be treated elsewhere.
    (b) Special convalescent camps where recovered cases can go and not be subject to the harmful influences for those cases which exist in camps for ordinary medical and surgical cases.
    (c) Employment of the Special Board of medical officers, recommended under "1 (d)," to visit all re-education centers and convalescent camps in which war neuroses are treated to see that adequate treatment is being given and to retire or discharge (with or without pension) those not likely to recover.

EXPEDITIONARY FORCES

I. OVERSEAS

The plan herein suggested for dealing with mental and functional nervous diseases in the expeditionary forces overseas presupposes that all sick and wounded soldiers who are not likely to be returned for duty in the fighting line within six months will be evacuated to home territory. The same considerations which led to the adoption of this policy by the Canadian Army are equally valid in the case of American troops. If large numbers of the sick and wounded who are not likely to return to active duty have to be cared for in France during long periods of disability, the amount of food and other supplies which must be sent overseas for them and for those who care for them will diminish the tonnage available for the transportation of munitions required for successful military operations; the great auxiliary hospital facilities available in the United States cannot be utilized and, in the case of the severe neuroses, fewer recoveries will take place. If submarine activities seriously interfere with the return of disabled soldiers to the United States and it is necessary to provide continued care, chronic cases should be evacuated to special hospitals established in France for this purpose. It is very desirable to maintain an active service in base hospitals that receive cases from the front. This is especially true in the case of the war neuroses.

(a) *Base Section of Lines of Communication.* The base upon which each army rests should be provided with a special base hospital of five hundred beds for neuro-psychiatric cases. Three years' experience in treating these cases in general hospitals in

England and France amply demonstrates the need for such an institution. Few more hopeful cases exist in the medical services of the countries at war than those suffering from the war neuroses grouped under the term "shell shock" *when treated in special hospitals by physicians and nurses familiar with the nature of functional nervous diseases and with their management.* On the other hand, the general military hospitals and convalescent camps presented no more pathetic picture than the mismanaged nervous and mental cases which crowded their wards before such special hospitals were established. Exposed to misdirected harshness or to equally misdirected sympathy, dealt with at one time as malingerers and at another as sufferers from incurable organic nervous disease, "passed on" from one hospital to another and finally discharged with pensions which cannot subsequently be diminished, their treatment has not been a wholly creditable chapter in military medicine. As one writer has said, "they enter the hospitals as 'shell shock' cases and come out as nervous wrecks." To their initial neurological disability (of a distinctly recoverable nature) are added such secondary effects as unfavorable habit-reactions, stereotypy and fixation of symptoms, the self-pity of the confirmed hysteric, the morbid timidity and anxiety of the neurasthenic and the despair of the hypochondriac. In such hospitals and convalescent homes inactivity and aimless lounging weaken will, and the attitude of permanent invalidism quickly replaces that of recovery. The provision of special facilities for the treatment of "shell shock" cases is imperative from the point of view of military efficiency as well as from that of common humanity, for more than half these cases can be returned to duty if they receive active treatment in special hospitals from an early period in their disease.

British experience indicates that about one hundred of the beds in each such special base hospital would be occupied by mental cases and the rest by those suffering from war neuroses. It is not necessary to make this division arbitrarily in advance, however, as both classes of cases can be cared for in the type of hospital to be proposed and re-distribution of patients can be made from time to time as circumstances require. It should be the object of these special base hospitals to provide treatment for all cases likely to recover and be returned to active duty within six months. Practically all mental cases, even those who recover during this period, as well as functional nervous cases presenting an unfavorable outlook or which are unimproved by special treatment, should be evacuated to the United States as rapidly as transportation conditions will permit.

Each such hospital should be located with reference to its accessibility to other hospitals along the lines of communication of the army which it serves. This will necessitate its being on the main railway line down which disabled soldiers are evacuated from the front. It should also be within convenient reach of, although not necessarily at, the port of embarkation. If it is possible to secure a site in southern France where outdoor work can be continued during the winter many important advantages will be gained. Gardening and other outdoor occupations are so valuable that the amount of ground adjoining each base hospital, or contiguous to it, should be not less than one acre for every six patients of one third its population. Thus, at least thirty acres are required for a hospital with 500 beds.

The type of general hospital adopted by the American Army for cantonment camps could be used, with certain interior changes, but it would be more advantageous to secure a hotel or school and remodel it to perform the special functions of a hospital of this character. The living arrangements in these special hospitals are simpler than in general hospitals for medical and surgical cases. About five per cent of the bed-capacity will have to be in single rooms. This percentage will be somewhat greater in the psychiatric division and smaller in the neurological division. Less than three per cent of the population will be bed-patients. A sufficient number of rooms in both the neurological and psychiatrical divisions should be set aside for officers—the higher proportion of officers among patients with neuroses being taken into consideration in planning this department.

It is necessary to allow liberally for examining rooms, massage, hydrotherapy and electrotherapy and to provide one large room which can be used for an amusement hall. When the patients and staff have been suitably housed attention should be directed to the highly important features of shops, industrial equipment, gymnasium and gardens. If no suitable buildings close to the hospital can be secured, perfectly adequate facilities can be provided in cheaply constructed wooden huts with concrete floors. A gymnasium can be erected more cheaply than an existing building can be adapted for this purpose unless a large storehouse, barn or factory is available.

Hydrotherapeutic equipment should include continuous baths, Scotch douche, needle baths and a swimming pool. The latter is exceptionally valuable in the treatment of functional paralyses and disturbances of gait which disappear while patients are swimming, thus often opening the way for rapid recovery by persuasion.

Electrical apparatus is necessary for diagnostic purposes and also for general and local treatment.

Second in importance only to the general psychological control of the situation in functional nervous diseases* is the restoration of the lost or impaired functions by re-education. None of the methods available for re-education are so valuable in the war neuroses as those in which a useful occupation is employed as the means for training. Re-education should commence as soon as the patient is received. Thought, will, feeling and function have all to be restored and work toward all these ends should be undertaken simultaneously. Non-productive occupations are not only useless but deleterious. The principle of "learning by doing" should guide all re-educative work. Continual "resting," long periods spent alone, general softening of the environment and occupations undertaken simply because the mood of the patient suggests them are positively harmful, as shown by the poor results obtained in those general hospitals and convalescent homes in which such measures are employed.

The industrial equipment needed is relatively simple and inexpensive. It is very desirable to begin with a few absolutely necessary things and to add those made by the patients themselves. When this is done every piece of apparatus is invested, in the eyes of the patients, with the spirit of achievement through persistent effort—the very keynote of treatment. The fact that it has been made by patients recovering from neuroses will help hundreds of subsequent patients through the force of hopeful suggestion. The following list gives the equipment for the shops which is necessary at the beginning:

Smiths' shop
    Forges, tools, etc. for ten men
Fitting shop
    One screw-cutting lathe, one sensitive drill, one polishing machine, one electric motor 1½ h.p., swages and tools for eight men

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*See pp. 522, 523.

Leather blocking room
  Sewing machine, eyeletting machine, tank, galvanized iron and tools
Tailors' shop
  Three sewing machines, tools for ten men
Carpenters' shop
  Selected tools for fifteen men, bench screws and special tools not for general use, wood-turner's lathe
Machine shop
  Electric motor 8½ h.p., with shafting, brackets, etc.
Cement shop
  Metal moulds, tools for twelve men
Printing shop
  Press and accessories
General
  Drilling machine, grindstone, screw-cutting lathe, fret-saw workers' machine and patterns, circular-saw bench

Practically all gymnasium apparatus can be made in the shops after the hospital is opened.

Each special base hospital should be able to evacuate patients who, although not quite able to return to active duty, no longer require intensive treatment. For this purpose one or more convalescent camps within convenient distance by motor truck from the main institution should be established. Each of these convalescent camps should not exceed 100 in capacity. It will require only one medical officer, one sergeant, three female nurses, an instructor and three or four hospital corps men, as the patients will be able to care for themselves and in a short time return to duty.

One camp may have to be established for the care of another type of cases. It is conceivable that submarine activity will interfere so seriously with the evacuation of chronic and non-recoverable cases to the United States that the special hospital will be overcrowded. Overcrowding will instantly interfere with the success of the work and this will simply mean that men who otherwise might recover and return to military duty at the front will fail to do so. Such a calamity can be averted by transferring chronic and non-recoverable cases to a camp organized upon quite simple lines under direct control of the main hospital and near enough to utilize its therapeutic resources. The beds which such patients would otherwise occupy in the special base hospital can be made available for the use of fresh, recoverable cases. Such developments might better be made naturally as circumstances require than provided for by any formal arrangements made in advance.

Each base hospital should have the personnel enumerated in the following table:

PERSONNEL FOR SPECIAL BASE HOSPITAL FOR NEURO-PSYCHIATRIC CASES

COMMISSIONED OFFICERS		
Major	M.C.	Commanding Officer
Captain	M.C.	Adjutant, Surgeon of the Command, Recruiting Officer
Captain	Q.C.	Quartermaster
Major	M.R.C.	Director
Major	M.R.C.	Chief Neurological Division
Major	M.R.C.	Chief Psychiatrical Division
Major	M.R.C.	Chief Occupational Division
Captain	M.R.C.	Pathologist
Captain	M.R.C.	In charge of Convalescent Camp
Captain	M.R.C.	In charge of Electrotherapy and Hydrotherapy
Captain	M.R.C.	Ward Physician (in charge of Transportation of Patients)
Captain	M.R.C.	Ward Physician
Captain	M.R.C.	Ward Physician
1st Lieutenant	M.R.C.	Ward Physician
1st Lieutenant	M.R.C.	Ward Physician
1st Lieutenant	M.R.C.	Ward Physician
1st Lieutenant	M.R.C.	Ward Physician
1st Lieutenant	M.R.C.	Ward Physician
1st Lieutenant	San.C.	Psychologist
1st Lieutenant	San.C.	Registrar
NON-COMMISSIONED OFFICERS		
Sergeant, 1st Cl.	H.C.	General Supervision
Sergeant, 1st Cl.	Q.C.	Quartermaster Sergeant
Sergeant, 1st Cl.	H.C.	Office
Sergeant, 1st Cl.	H.C.	In charge of Detachment and Detachment Accounts
Sergeant, 1st Cl.	H.C.	In charge of Mess and Kitchen
Sergeant, 1st Cl.	H.C.	General Supervision, Convalescent Camp
Sergeant, 1st Cl.	H.C.	In charge of Shops
Sergeant, 1st Cl.	H.C.	In charge of Garden and Grounds
Sergeant	H.C.	Hydrotherapy Rooms
Sergeant	H.C.	Electrotherapy Rooms
Sergeant	H.C.	Massage Rooms
Sergeant	H.C.	Shops
Sergeant	H.C.	Gymnasium
Sergeant	H.C.	Mess and Kitchen
Sergeant	H.C.	Storerooms
Sergeant	H.C.	Office
Sergeant	H.C.	Office
Sergeant	H.C.	Outside Police
Sergeant	H.C.	Wards
Sergeant	H.C.	Wards
Sergeant	H.C.	Wards
Sergeant	H.C.	Wards
Sergeant	H.C.	Wards
Sergeant	H.C.	Transportation of Patients

Female Nurses (N.C.)

Chief nurse	1	46
Assistant to Chief Nurse	1	
Dietist	1	
Ward Nurses	43	

Enlisted Men (H.C.)

14 Acting Cooks
115 Privates, 1st Cl. and Privates
Distributed as follows:

Ward Attendants		
Neurological Division	22	52
Psychiatrical Division	26	
Convalescent Camp	4	
Shops		10
Electrotherapy rooms		4
Hydrotherapy rooms		4
Massage rooms		6
Laboratory		2
Kitchens and mess		14
Office		5
Storerooms		6
Orderlies		4
Outside Police		4
Supernumeraries		4
		115

Civilian Employees

Instructors		
Outdoor occupations	1	2
Indoor occupations	1	
Assistant Instructors		
Carpentry and wood carving	1	8
Cement work	1	
Metal work	1	
Leather work	1	
Gardening	1	
Printing	1	
Gymnasium	2	
Stenographers		4
Photographer		1
Laboratory technician		1
		16

Recapitulation

Commissioned officers	20
Non-commissioned officers	24
Female nurses	46
Enlisted men	129
Civilian employees	16
	235

The commissioned medical officers should all be men with excellent training in neurology and psychiatry. The neurologists should have a psychiatrical outlook and the psychiatrists should be familiar with neurological technique. Of importance almost equal to the professional qualifications of these officers is their character and tact, and no man who is unable to adjust his personal problems should be selected for this work. There is no place in such hospital for a "queer," disgruntled or irritable individual except as a patient. Men who are strong, forceful, patient, tactful and sympathetic are required. It is better to permit a medical officer not having these qualifications to remain at home than to assign him to one of these hospitals and allow him to interfere with treatment by his failure to establish and maintain proper contact with his patients. The resources to be employed include psychological analysis, persuasion, sympathy, discipline, hypnotism, ridicule, encouragement and severity. All are dangerous or useless in the hands of the inexperienced, as the records of "shell shock" cases treated in general hospitals testify. In the hands of men capable of forming a correct estimate of the make-up of each patient and of employing these resources with reference to the therapeutic problem presented by each case, they are powerful aids.

The female nurses should have had experience in the treatment of mental and nervous diseases. Character and personality are as important in nurses as in medical officers. A large proportion of college women will be found advantageous.

The enlisted men who perform the duties of ward attendants and assistants in the shops, gardens and gymnasium should include a considerable number of those who have had experience in dealing with mental and nervous diseases. The civilian employees who act as instructors should all have had practical experience in the use of occupations in the treatment of nervous and mental diseases. The instructor for bed occupations should be a woman and she should train the female nurses to assist her in this kind of work.

No work is more exacting than that which will fall to the physicians and chief lay employees in such hospital. Success in treatment depends chiefly upon each person's establishing and maintaining a sincere belief in the work to which he or she is assigned. No hysterical case must be regarded as hopeless. The maintenance of a correct attitude and constant co-operation between physicians, nurses, instructors and men in the face of the tremendous demands which neurotic patients make upon the patience and resourcefulness of those treating them soon bring weariness and loss of interest if opportunities for recreation do not exist. Therefore, it should be the duty of the director to see that the morale and good spirits of all are kept up. His recommendations as to the transfer to other military duties of medical officers, nurses, instructors or men who prove unsuited for this work should be acted upon whenever possible by the chief surgeon under whom the hospital serves. A man or a woman may prove unadapted to this work and yet be a valuable member of the staff of another kind of hospital. This subject is mentioned so particularly because of its great importance. The type of personnel will determine the success of this hospital and hence its usefulness to the army in a measure which is unknown in other military hospitals. It does not greatly matter whether the operating surgeon understands the personality of the soldier upon whom he is operating or not. Whether or not the physician treating a case of "shell shock" understands the personality of his patient spells success or failure.

The first special base hospital established for neuro-psychiatric cases should have so highly efficient a personnel that it will be able to contribute one third of its medical officers and trained workers to the next similar base hospital to be established, filling their places from those on its reserve list. This should be repeated a second time if necessary and thus a uniform standard of excellence and the same general approach to problems of treatment assured in each special base hospital organized in France.

(b) *Advanced Section of Lines of Communication.* The French and the British experience shows the great desirability of instituting treatment of "shell shock" cases as early as possible. So little has been done as yet in this direction that we do not know much about the onset of these cases and just what happens during the first few days. Such information as has been contributed, however, by the few neurologists and psychiatrists who have had an opportunity of working in casualty clearing stations or positions even nearer the front indicates that much can be done in dealing with these cases if they can be treated within a few hours after the onset of severe nervous symptoms. There are data to show that even by the time these cases are received at base hospitals additions have been made to the initial neurological disability and a coloring of invalidism given which frequently influences the prospects of recovery. It is desirable, therefore, to provide neuropsychiatric wards for selected base hospitals in the advanced section of the lines of communication. Other base hospitals can send cases to those which possess such wards. The plan of providing such sections, in charge of neurologists and psychiatrists, for divisional base hospitals in the cantonment camps in the United States has been adopted by the Surgeon-General. If it is found practicable to make similar provisions in France, these units can accompany the divisions to which they are attached when they join the expeditionary forces in the spring of 1918. In the meantime it is essential that each base hospital should have on its staff a neurologist or a psychiatrist. Provision for the care of mental and nervous cases nearer the front, along the lines of communication, can best be developed, after the first special base hospital for neuro-psychiatric cases has been established, by detaching from its staff individual officers as actual circumstances require.

It is undesirable to formulate plans for providing this kind of care still nearer the fighting line until a more careful study has been made of the results obtained by the English and French medical services in this undertaking.

The foregoing recommendations are illustrated graphically in the upper part of the accompanying chart from Major Pearce Bailey's recent paper.*

II. IN THE UNITED STATES

(a) *Mental Diseases* (*Insanity*). If the policy is adopted of caring in France for mental cases likely to recover and evacuating all others to the United States at once or at the expiration of six months' treatment, we may expect to receive at the port of arrival in the United States not less than 250 insane soldiers per month from an expeditionary force of 1,000,000. We may assume that a plan will be adopted for the reception and the distribution of soldiers invalided from France such as proposed by Major Bailey.

Well-organized facilities for dealing with mental disease exist in the United States which can be utilized by the government without the necessity of creating expensive new agencies. It is obvious that the first facts to be determined in the case of soldiers

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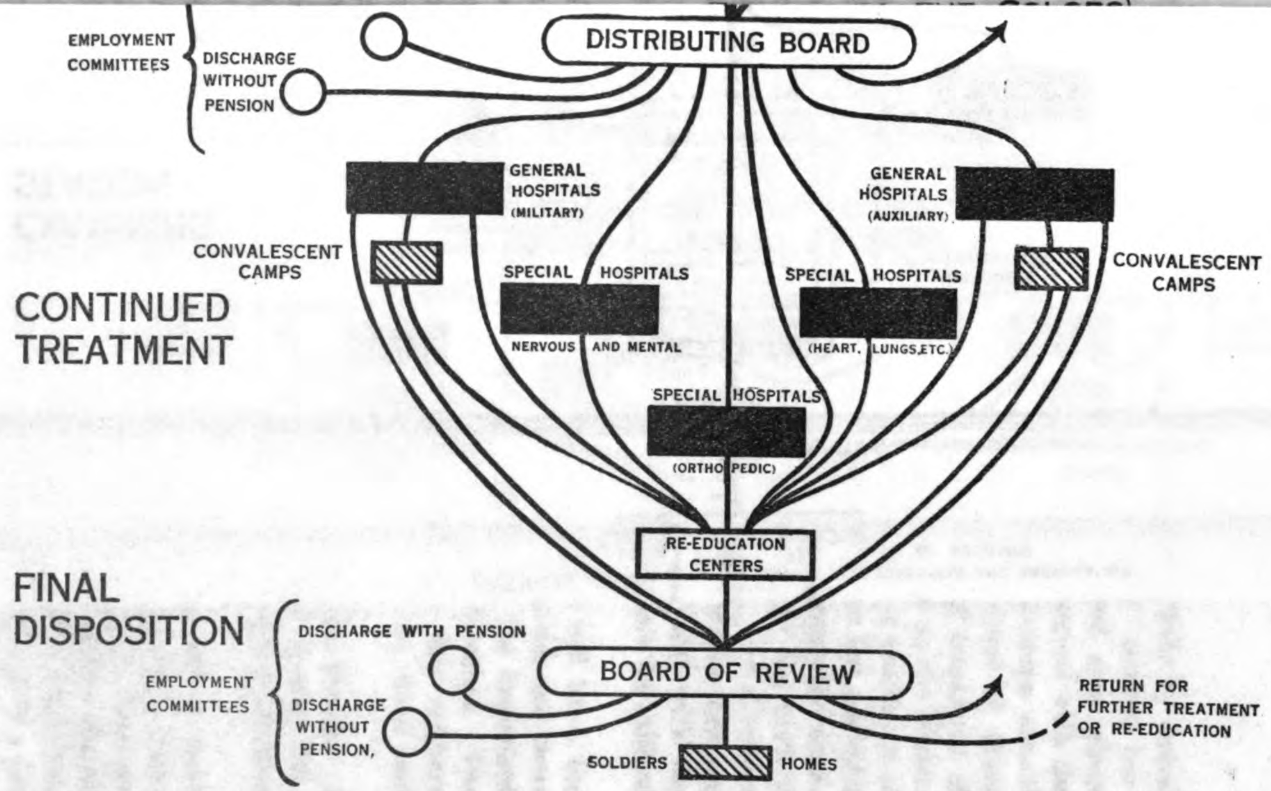
* MENTAL HYGIENE, Vol. I, No. 3 (July, 1917).

CAREER OF DISABLED RETURNED SOLDIERS


EMPLOYMENT COMMITTEES
DISCHARGE WITHOUT PENSION
DISTRIBUTING BOARD
GENERAL HOSPITALS (MILITARY)
GENERAL HOSPITALS (AUXILIARY)
CONVALESCENT CAMPS
CONVALESCENT CAMPS
CONTINUED TREATMENT
SPECIAL HOSPITALS NERVOUS AND MENTAL
SPECIAL HOSPITALS (HEART, LUNGS,ETC.)
SPECIAL HOSPITALS (ORTHOPEDIC)
RE-EDUCATION CENTERS
FINAL DISPOSITION
DISCHARGE WITH PENSION
EMPLOYMENT COMMITTEES
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MENTAL HYGIENE, VOL. 1, No. 3

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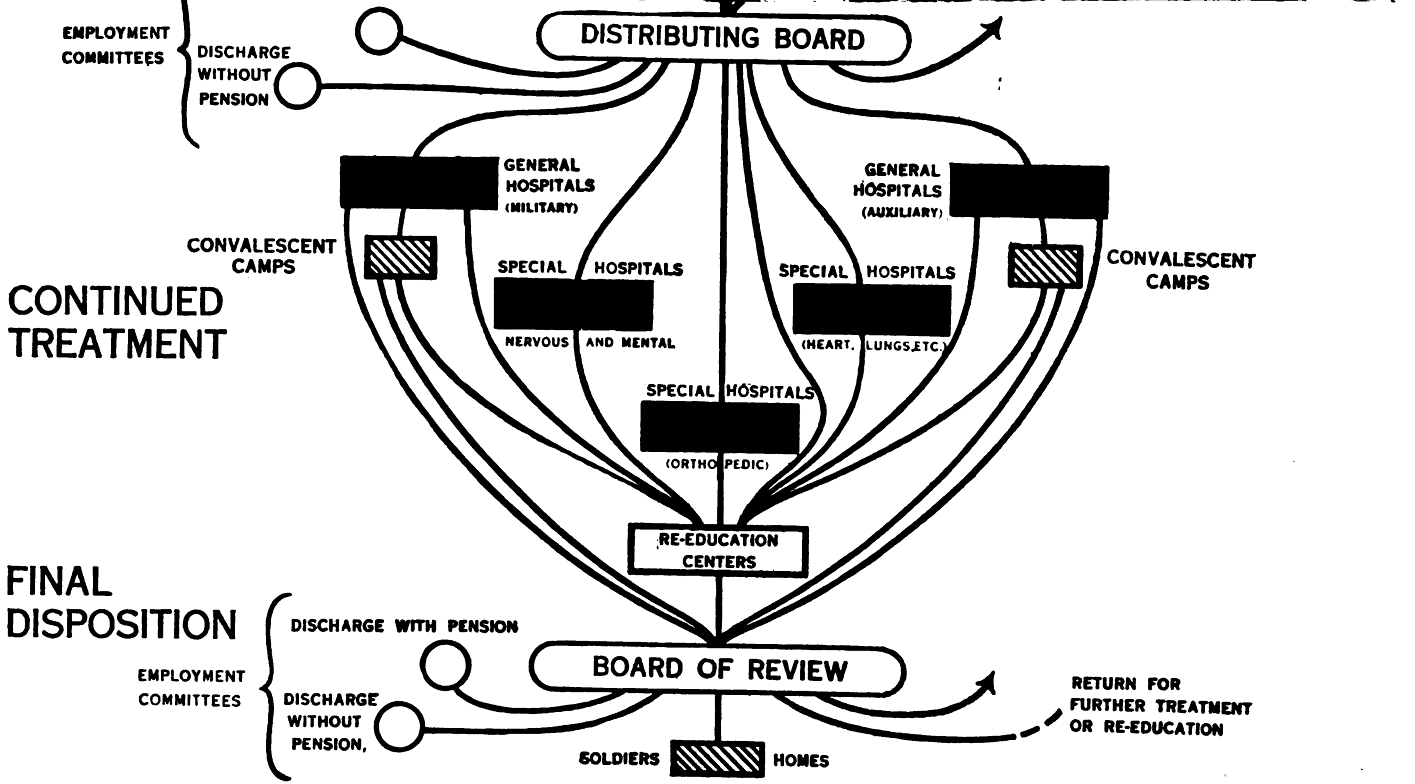
DISTRIBUTING BOARD
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reaching the United States while still suffering from mental disorders or who have been invalided home after recovery from acute attacks, are:

1. The cause of the disorder, with special reference to military service.
2. The probable outcome.
3. The probable duration.
4. The special needs in treatment.

It is quite impossible to ascertain any of these facts by casual examination and so it will be necessary to provide "clearing hospitals" for non-commissioned officers and enlisted men where patients may be received and studied upon their arrival with the view of determining these questions. With an average annual admission rate of 3,000 patients, a clearing hospital of three hundred beds would permit an average period of treatment of thirty-six days. This would seem to be sufficient as the Boston Psychopathic Hospital, during an average period of treatment of eighteen days, not only determines similar questions but provides continued care for a considerable number of recoverable cases. Such clearing hospitals should be established near the port of arrival and should be essentially military hospitals, with directors who are not only well trained in their medical duties but are familiar with the requirements of military life and with the institutional provisions in the United States that can be utilized for continued treatment.

With such active service as a clearing hospital will have, the number of medical officers should be not less than ten and there should be an adequate clerical force to care for the important administrative matters which would require attention. The organization of civil psychopathic hospitals in this country affords data for determining the proper size of the ward and domestic services.

After a period of observation and treatment the director of such hospital should be prepared to furnish the Special Distributing Board with information and definite recommendations as to the further disposal of each case.

Some patients will be found at the clearing hospitals to have recovered. Although, as a matter of military policy, these patients will not be available for duty again in France, they are still of military value to the government. Such soldiers should be returned to duty in the United States by the Special Distributing Board in a category which would prevent their being exposed again in the fighting line but which would indicate precisely the work for which they are suited. We can conceive of many such soldiers who are likely to break down again under the stress of actual fighting but who are quite likely to remain in good health if they are not so exposed. These men will have had valuable military experience and could render efficient service as instructors in training camps or in the performance of other military duties in the United States. Others who have recovered will give evidence of possessing such an unstable or inferior mental make-up that no further military life, even in the United States, is desirable. In such cases, recommendations should be made by the directors of the clearing hospitals to the Special Distributing Board to discharge them to their homes, with or without pensions as the circumstances demand.

There will be found others who have not been benefited at all by treatment in France and who suffer from mental disorders with an extremely unfavorable outlook for recovery. When this conclusion seems justified, the directors of the clearing hospitals should recommend these cases for transfer to a suitable public or private institution in the states from which they enlisted and their discharge from the army, with or without pension as the circumstances demand.

Another group of cases will be made up of those suffering from psychoses which are probably recoverable. It is equally to the advantage of the army, the community and the patient that such soldiers be given continued treatment. Facilities for the care of mental diseases vary so greatly in many of the states that neither the army nor the patients can receive any assurance that proper treatment will be afforded if such soldiers are discharged to the public institution nearest their homes. In such cases the important question of discharge, with or without pension, should be deferred until every facility has been given, during a reasonable period of time, for recovery to take place. It is recommended, therefore, that these cases be retained in the army until their recovery or until the end of the war and ordered for treatment to state hospitals with which the Secretary of War has made contracts. A government hospital for the insane would be the most suitable for carrying out such treatment but the present excellent institution in Washington has reached the size of 3,135 beds and can care for few additional military cases. It is highly desirable that the government should now establish a military hospital for mental diseases for the army and navy and permit the government hospital to devote all its resources to its civil duties., It would be impossible, however, to have such institution ready within two years. If it were possible to construct such new government hospital in a shorter time, it would still be necessary to provide for treatment by contract, for this institution would probably have to care for not more than 1,500 military cases during peace. A much larger number is to be expected during the war

It is wiser to care for insane soldiers during the war under contract at ten or twelve first-class hospitals with fully adequate facilities for treatment than to distribute them solely with reference to the location of their homes. This will involve a certain hardship through making it difficult for such men to be visited by their relatives and friends but it is possible to distribute the contract hospitals over the country in such way that there would be few cases more than a day's journey from their homes. The primary object is to insure recovery in all recoverable cases. This should outweigh all other considerations.

The legislation permitting the Secretary of War to make such contracts should state clearly that they shall be made only with institutions possessing facilities for treatment laid down by the Surgeon-General. A list of such facilities, prepared by the National Committee for Mental Hygiene for another purpose, is appended* as it may form a useful guide in this connection. The contract hospitals should be required to devote an entire building of approved construction to military cases or to erect temporary structures meeting the necessary requirements for this purpose.

In order that the army may be able to discharge mental cases cared for under contract promptly upon their recovery or upon ascertaining that recovery is unlikely, it is desirable that a special board of three medical officers should be established to visit the institutions constantly and act as a Board of Survey. If a medical officer in each contract hospital were appointed in the Medical Reserve Corps and assigned to the duty of caring for army patients he could serve as a member of such board when convened at his hospital and make it possible for the three general members to cover much more ground.

Clearing wards for officers should be established to serve the special purposes indicated in the description of the clearing hos-

*P. 546.

pitals for enlisted men. Such wards should provide for the reception, classification, and treatment in cases likely to be of short duration. They might be established in connection with general hospitals at the port of arrival or in connection with very efficient private institutions for the insane in which full military control of this department could be secured.

It is equally important to provide for the continued treatment of officers and not to leave this question, in which the army has so great an interest, to choice or geographical convenience. Arrangement similar to those for the continued care of enlisted men in public contract hospitals could easily be made with the best, endowed private institutions for the insane.

(b) *War Neuroses* (*"Shell Shock"*). It is not necessary here to outline the organization of reconstruction centers for the treatment of war neuroses in the United States. The general principles in treatment described in the foregoing report and in the plan recommended for France should be a guide in the development of those centers.

It should be remembered that if the policy recommended of evacuating to the United States only the patients who fail to recover in six months in France is adopted, some very intractable cases will be received. For the most part these will be patients with a constitutional neuropathic make-up—the type most frequently seen in civil practice. Many of these cases will prove amenable to long-continued treatment and much can be expected from the mental effect of return to the United States. It is very important not to fall into the mistake made in England of discharging these severe cases with a pension because of the discouraging results of treatment. To do so will swell the pension list enormously, as can be seen by the fact that 15 per cent of all discharges from the British Army are unrecovered cases of mental diseases and war neuroses. Quite aside from financial considerations, however, is the injustice of turning adrift thousands of young men who developed their nervous disability through military service and who can find in their home towns none of the facilities required for their cure. It is recommended, therefore, that *no soldiers suffering from functional nervous diseases be discharged from the army until at least a year's special treatment has been given*. Furloughs can be given when visits home or treatment in civil hospitals will be beneficial but the government should neither evade the responsibility nor surrender the right to direct the treatment of these cases. A serious social and economic problem has been created in England already through the establishment in its communities of a group of chronic nervous invalids who have been prematurely discharged from the only hospitals existing for the efficient treatment of their illness. So serious is this problem that a special sanitarium "The Home of Recovery"—the first of several to be provided—has been established in London and subsidized by the War Office for the treatment of such cases among pensioners.

It is highly important not to permit convalescent cases of this kind to be cared for in the ordinary type of convalescent camp or home. The surroundings so suitable for convalescents from wounds or other diseases are very harmful to neurotic cases. Here much that has been accomplished in special hospitals by patient, skilful work is undone. Therefore, special convalescent camps similar to those recommended for the expeditionary forces in France should be established within convenient reach of the reconstruction centers.

The special board recommended for the final disposition of mental cases should deal with cases of functional nervous diseases.

NON-EXPEDITIONARY FORCES

Facilities for the treatment of neuro-psychiatric cases at the camps in the United States have been approved by the Surgeon-General and are now being provided. These will undoubtedly prove sufficient for dealing temporarily with mental cases developing in the non-expeditionary forces. Their final disposition should be made by means of the same mechanism recommended for expeditionary patients who are invalided home, except that the functions of the clearing hospital for mental diseases can be performed by the neuro-psychiatric wards of divisional hospitals and that of the special board by the Board of Survey composed of the neurologists and psychiatrists stationed at the camps.

Neuroses are very common among soldiers who have never been exposed to shell fire and will undoubtedly be seen frequently among non-expeditionary troops in this country. In England nearly 30 per cent of all men from the home forces admitted to one general hospital were suffering from various neuroses.* Most of these were men of very neurotic make-up. Many had

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*Burton-Fanning, F. W. Neurasthenia in soldiers of the home forces. *Lancet* (London). 1: 907-11 (June 16, 1917).

had previous nervous breakdowns. Fear, even in the comparatively harmless camp exercises, was a common cause of neurotic symptoms. Heart symptoms were exceedingly common. The same experience in our own training camps can be confidently predicted.

The responsibility of the government in such cases is obviously different from that in soldiers returning from duty abroad. In the neuro-psychiatric wards of divisional hospitals the important and difficult question of diagnosis can be well determined. Most such cases should be discharged from the service. Some can be treated at the reconstruction centers for, unfortunately, there are scarcely any provisions in the United States for the treatment of the neuroses except in the case of the rich. It is freely predicted in England that the wide prevalence of the neuroses among soldiers will direct attention to the fact that this kind of illness has been almost wholly ignored while great advances have been made in the treatment of all others. In civil life one still hears of detecting hysteria, as if it were a crime and, although the wounded burglar is carefully and humanely treated in the modern city hospital, the hysteric is usually driven away from its doors. Today the enormous number of these cases among some of Europe's best fighting men is leading to a revision of the medical and popular attitude toward functional nervous diseases.

FACILITIES NEEDED FOR EFFICIENT TREATMENT OF MENTAL DISEASES IN A MODERN PUBLIC INSTITUTION

For the treatment of any class of the sick these fundamental provisions are required: sanitary housing, good food, good clothing, skill, kindliness and appreciation of the aims of the hospital on the part of all those charged in any way with the care or supervision of patients. These fundamental provisions must be made effective by a sound administrative system, free from political or other selfish control, in which the medical and scientific purposes of the hospital are primary considerations. With these provisions constituting the absolutely essential ground work for the treatment of any class of the sick, the following may be stated to constitute the facilities needed for the modern treatment of mental diseases in a public institution for the insane:

1. Direction of the administration of the hospital and leadership in its medical work by a physician trained in the diagnosis and treatment of mental diseases.

2. An adequate medical staff, organized so that duties are divided in accordance with the training of its different members and with the requirements of the clinical work.
3. Regular and frequent conferences of the medical staff at which the diagnosis, treatment and prognosis of each new case admitted are considered and at which cases about to be discharged are presented, training in psychiatry for new members of the staff being considered a special object.
4. The reception of all new cases in a special department or in special wards where they may receive careful individual study and where those with recoverable psychoses may receive continuous individual treatment.
5. Classification of all patients with reference to their special needs and their clinical condition, such classification being flexible enough to permit frequent changes.
6. A system of clinical records which permits study and review of the history of cases even after they have been discharged.
7. A laboratory in which some of the more useful tests required for the study and diagnosis of mental diseases as well as for those required in general clinical diagnosis can be made and in which pathological material can be studied.
8. Provision for special treatment such as hydrotherapy and electrotherapy.
9. Provision for examination and treatment by dentists, opthalmologists, gynecologists, and other specialists.
10. An adequate number of trained nurses and the maintenance of a school for nurses, under the direction of a supervisor of nurses who should have not only training in general nursing but special training in nursing patients with mental diseases.
11. The employment of female nurses in the reception and infirmary wards for men.
12. The systematic use of occupations, for their therapeutic effects, under the direction of workers specially trained for this duty.
13. Special attention to recreation and diversion, with reference to their therapeutic value.
14. Liberal use of parole especially for quiet, chronic patients who can live in farmhouses.
15. Special provision for the tuberculous.

INSANE, FEEBLEMINDED, EPILEPTICS AND INEBRIATES IN INSTITUTIONS IN THE UNITED STATES, JANUARY 1, 1917

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IN order to ascertain the extent of institutional care of the insane, feebleminded, epileptics and inebriates in the several states of the Union, the National Committee for Mental Hygiene took a census on January 1, 1917, of the patient population of the institutions caring for these classes throughout the country. Responses were promptly received from most of the institutions. Those not replying to the first request were appealed to a second or third time, and the data with respect to state institutions were thus finally made complete. More difficulty was experienced in securing the census of private institutions and the figures relating to such institutions are necessarily somewhat deficient. It is believed, however, that the number of patients in private institutions concerning which we have no record is comparatively small and consequently would but slightly affect the totals and ratios given in the tables.

The institutions represented in the tables, which comprise practically all those in the country caring for the classes enumerated, except almshouses, jails, reformatories and penal institutions, may be classified as follows:

1. Number of institutions represented	**571**
a. Public	**346**
b. Private	**225**
2. Public institutions for insane	
a. State hospitals	**156**
b. County or city institutions (not including those for temporary care)	**109**
c. Institutions for temporary care	**17**
3. State institutions for feebleminded	**32**
4. State institutions for feebleminded and epileptics	**6**
5. State institutions for epileptics	**11**
6. State institutions for inebriates	**4**

7. Private institutions

a. Having insane only	48
b. Having feebleminded only	30
c. Having epileptics only	4
d. Having inebriates only	23
e. Having more than one of these classes	120

Census of Public and Private Institutions

(See Table I, page 556.)

INSANE

The census shows that there were 234,055 insane patients under treatment in institutions in the United States on January 1, 1917. Of these, 225,824 were in public institutions and 8,231 in private hospitals. Of those in public institutions, 203,206 were cared for in state hospitals, 21,857 in county or city institutions, and 761 in institutions for temporary care.

Every state in the Union has one or more state hospitals for the care of the insane; in all but eight states the care of the insane is exclusively a state function. In these eight states, viz: Indiana, Iowa, Michigan, Missouri, New Jersey, Pennsylvania, Tennessee and Wisconsin, the burden of the insane is in part borne by the cities or counties. Wisconsin is the only state in which the number of the insane under county care exceeds the number under state care.

The institutions for temporary care include psychopathic hospitals or psychopathic wards in general hospitals and a few detention hospitals. Psychopathic hospitals and wards are found in Illinois, Massachusetts, Michigan, New York, Ohio, and Pennsylvania. Nearly all large cities and a few counties have detention wards either in hospitals or correctional institutions. In most instances the population of these has not been enumerated on account of the rapidity of movement. However, in California, Colorado, Illinois, Louisiana and Michigan, there are detention hospitals in which patients remain for a sufficient length of time, and in which an attempt is made to institute treatment, which would warrant our including these institutions in this census.

Private institutions for the care of the insane are found in thirty states. In most states the number under treatment in these institutions is very small compared with the number found in public institutions.

The following summary gives the number and per cent distribution of the patients cared for in each kind of institution:

Insane in Institutions, 1917

	Number	Per cent
Public institutions	225,824	96.5
State hospitals	203,206	86.9
County and city institutions	21,857	9.3
Institutions for temporary care	761	0.3
Private institutions	8,231	3.5
Total	234,055	100.0

FEEBLEMINDED

It is generally estimated that the total number of the feebleminded in the country exceeds that of the insane, but much greater institutional provision for the latter class is found in every state of the Union.

The census shows a total of 37,220 feebleminded persons in institutions throughout the country. Of these, 34,404 were in public institutions and 2,816 in private institutions. State institutions were caring for 31,361 and other public institutions, for 3,043. California, Colorado, Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia, Washington, Wisconsin and Wyoming maintain state institutions for the feebleminded. In the remaining states this class is to be found in the hospitals for the insane.

Feebleminded cases are found in private institutions in twenty-eight states but in only four states does the number thus cared for reach 100.

A summary of the distribution of the feebleminded cases in institutions is shown in the following tabulation:

Feebleminded in Institutions, 1917

	Number	Per cent
Public institutions	34,404	92.4
State	31,361	84.3
Other	3,043	8.1
Private institutions	2,816	7.6
Total	37,220	100.0

EPILEPTICS

The epileptics enumerated, which did not include those insane or feebleminded, totaled 10,801. Of these, 10,394 were cared for in public institutions and 407 in private institutions. State institutions, proper, provided for 9,935 cases and other public institutions for 459. State institutions for epileptics are maintained in Connecticut, Indiana, Kansas, Massachusetts, Michigan, New Jersey, New York, North Carolina, Ohio, Texas and Virginia. In the remaining states this class is found either in institutions for the feebleminded or in those for the insane.

Epileptics are cared for in private institutions in twenty-one states, but in only one state does the number of cases in such institutions exceed 100.

The following is a summary of the distribution of epileptics in institutions:

Epileptics in Institutions, 1917

	Number	*Per cent*
Public institutions	10,394	96.2
State	9,935	92.0
Other	459	4.2
Private institutions	407	3.8
Total	10,801	100.0

INEBRIATES

The census showed a total of 4,891 inebriates receiving institutional care. Of these, 3,991 were in public institutions and 900 in private institutions. There were 3,086 in state institutions and 905 in other public institutions. State institutions for inebriates are found in Connecticut, Iowa, Massachusetts and Minnesota. New York City maintains an institution at Warwick. The extent of private care of inebriates throughout the country is also very meager. In New Jersey 203 cases were reported in private institutions; in every other state the number was less than 100.

The distribution of this class in institutions may be summarized as follows:

Inebriates in Institutions, 1917

	Number	*Per cent*
Public institutions	3,991	81.6
State	3,086	63.1
Other	905	18.5
Private institutions	900	18.4
Total	4,891	100.0

Increase of Insane in Institutions Compared with Increase of the General Population

(See Table II, page 558.)

According to estimates of the Federal Census Bureau, the population of the United States increased from 91,972,266 on April 15, 1910, to 102,826,309 on January 1, 1917, an increase of 11.80 per cent. The insane in institutions according to the Federal Census of January 1, 1910, and the census of the National Committee for Mental Hygiene of January 1, 1917, increased from 187,791 to 234,055, an increase of 24.64 per cent. The increase of the insane in institutions was relatively greater than that of the general population in every state except Arizona, Kansas, Mississippi, Nevada, and South Carolina. The states in which the disparity in increase was greatest were:

	Per cent of increase	
	General population	*Insane in institutions*
Arkansas	11.34	49.08
Florida	20.23	74.56
Illinois	9.84	27.38
Indiana	4.64	27.44
Maryland	5.63	25.31
Missouri	3.85	21.79
Nebraska	7.17	24.87
New Hampshire	2.99	20.79
North Carolina	9.62	36.64
Oklahoma	35.53	148.47

The differences in rate of increase of the general population and of the insane may be due to several causes, namely: (1) Marked additional institutional provision for the insane has been made in some of the states; this has caused the commitment to institutions of many cases formerly cared for in homes; (2) As institutions for the insane improve they become less dreaded by the public and more mild cases are admitted; (3) Laws permitting voluntary admission to institutions have been passed in several states; (4) There is a continual accumulation of chronic cases in the hospitals; (5) As the insanity rate is higher in cities than in rural districts, the rapid growth of cities becomes a factor in increasing such rate. Why these causes should produce wide differences in rate of increase in the several states can be explained only by a study of local conditions, which would include the composition of the population with respect to sex, age, race, and nativity; the environment, habits, customs and occupations of the people; and the laws of the states relating to physical and mental diseases.

Insane in Institutions by Divisions and States, 1910 and 1917

(See Table III, page 560.)

Table III gives a comparison of the insane in institutions by divisions and states in 1910 and in 1917. A marked increase in the number of patients is noted in each division although wide variations in the rate appear. The New England division continues to rank first in the number of insane in institutions per 100,000 of population and the Middle Atlantic division second. Massachusetts ranks first among the states and New York second.

The following tabulation compares the number of patients per 100,000 of population in the several divisions at the two census periods:

Insane in Institutions in the Several Divisions of the United States per 100,000 of Population 1910 and 1917

Division	*Rank in both periods*	*Number per 100,000*	
		1910	*1917*
New England	1	298.8	326.7
Middle Atlantic	2	271.2	296.9
East North Central	4	226.0	251.1
West North Central	5	194.9	219.8
South Atlantic	6	163.6	185.0
East South Central	8	116.0	124.9
West South Central	9	95.8	116.1
Mountain	7	135.7	148.8
Pacific	3	243.4	283.8

The most rapid increase in patients per 100,000 of population is found in the Pacific division and the slowest, in the East South Central division.

The District of Columbia has relatively a higher rate of insane under treatment than any of the states, as the government institution, known as St. Elizabeth's Hospital, admits patients from the army and navy as well as residents of the district.

The insane in institutions in the United States as a whole increased from 204.2 to 227.6 per 100,000 of population during the seven-year period.

Comparison of Censuses of 1890, 1904, 1910 and 1917

(See Table IV, page 562.)

Between the Federal census of 1890 and the census of the National Committee for Mental Hygiene of 1917, 26 years and 7 months elapsed. The increase of insane per 100,000 of general population during this period was 57.6, or 2.2 per year. During the period from 1890 to 1904 the increase was 13.6 or 1 per year; from 1904 to 1910, 20.6 or 3.4 per year and from 1910 to 1917, 23.4 or 3.3 per year. The rate of increase of the insane in institutions since 1904, therefore, has been over three times as rapid as it was during the 14 years preceding 1904. No acceleration of the rate, however, has taken place during the past seven years. The rates of increase in the several states during these periods vary widely. The following are a few notable examples:

Yearly Rate of Increase of Insane in Institutions per 100,000 of Population

	From 1890 to 1917	*From 1890 to 1904*	*From 1904 to 1910*	*From 1910 to 1917*
California	0.59	0.50	−6.03	6.45
Connecticut	2.16	0.91	5.53	1.71
Illinois	3.39	1.03	6.66	5.18
Maine	−0.14	−5.31	7.53	3.31
Maryland	5.15	3.40	7.40	6.61
Massachusetts	3.89	1.16	9.36	4.50
Michigan	2.32	2.50	4.41	0.21
New York	2.63	2.36	2.25	3.50
Ohio	1.14	−0.74	4.21	2.18
Washington	3.86	3.63	2.63	5.35
Wisconsin	3.95	1.74	8.36	4.45

To account for such marked variations would require a most careful study of local conditions and of changes in population in the several states. The irregularity in making additional provision for the insane in the several states explains the variations in part, but why marked decreases should be followed by increases of like magnitude is not clear.

Insane in State Hospitals

(See Table V, page 564.)

Table V shows the number of state hospitals in each state, the number of insane patients cared for therein on January 1, 1917, and the average number per hospital. Altogether there are 156 state hospitals for the insane housing 203,206 patients, or an average of 1,303 per hospital. New York has 15 state hospitals with an average of 2,451 patients per hospital; Massachusetts has 12, with an average of 1,138 patients; Illinois and Ohio each have 8, with an average of 2,013 and 1,514 patients respectively; Pennsylvania has 7, with an average of 1,360 patients; of the other states, 2 have 6 each; 3, 5 each; 5, 4 each; 8, 3 each; 9, 2 each; and 16, 1 each.

In 1910 there were 143 state hospitals with a total patient population of 159,096, or an average per hospital of 1,113. The data for 1917 with respect to state hospitals therefore show an increase of 13 institutions, and 44,110 patients. The average patient population per state hospital has increased 190 since 1910.

Increase of Feebleminded in Institutions

(See Table VI, page 565.)

That the movement for more adequate provision for the feebleminded in institutions is bearing fruit is clearly shown by Table VI. The feebleminded in institutions in the United States increased from 20,731 to 37,220, or 79.54 per cent, during the seven-year period from January 1, 1910 to January 1, 1917. In 1910, 17 states reported no feebleminded in institutions; in 1917, all but 4 states were making some institutional provision for this class. In 1910 the Federal Census Bureau estimated that not over one tenth of the feebleminded in the United States were being cared for in institutions. On the same basis and assuming that the increase in feebleminded has been at the same rate as the general population, there is now about one sixth of the total feebleminded population in institutions; but this is, of course, an indefinite estimate and no data have as yet been secured to support it.

This brief review of the insane and feebleminded in institutions indicates that marked progress is being made in caring for these classes of unfortunates. The number of institutions is rapidly increasing and the number of patients is mounting higher and higher. Institutions are also being much better constructed and methods of treatment are becoming more enlightened. The number of insane and feebleminded in the community with the evils associated therewith is consequently lessening.

Table I

Insane, feebleminded, epileptics and inebriates in institutions in the several states of the Union on January 1, 1917

State	Insane						Feebleminded				
	Total	Public				Private	Total	Public			Private
		Total	State hospitals	County or city institutions	Institutions for temporary care			Total	State institutions	Other institutions	
United States	234,055	225,824	203,206	21,857	761	8,231	37,220	34,404	31,361	3,043	2,816
Alabama	2,341	2,341	2,341	......	...	.....	......	......	......	.....	.....
Arizona	411	411	411	......	...	.....	50	50	50	.....	.....
Arkansas	1,628	1,628	1,628	......	...	.....	165	165	165	.....	.....
California	9,698	9,558	9,532	......	26	140	1,294	1,265	1,262	3	29
Colorado	1,613	1,515	1,493	4	18	98	224	211	208	3	13
Connecticut	4,180	3,846	3,846	......	...	334	438	432	432	.....	6
Delaware	484	484	484	......	...	.....	30	30	30	.....	.....
District of Columbia	3,082	3,082	3,058	......	24	.....	143	143	140	3	.....
Florida	1,482	1,482	1,482	......	...	.....	......	......	......	.....	.....
Georgia	4,062	4,009	4,009	......	...	53	4	......	......	.....	4
Idaho	540	540	540	......	...	.....	61	61	61	.....	.....
Illinois	16,354	16,272	16,104	......	168	82	2,305	2,225	2,224	1	80
Indiana	5,769	5,746	5,496	250	...	23	1,523	1,523	1,523	.....	.....
Iowa	6,367	5,684	4,784	900	...	683	1,772	1,709	1,499	210	63
Kansas	3,157	3,108	3,108	......	...	49	1,053	1,050	1,050	.....	3
Kentucky	4,348	4,328	4,328	......	...	20	504	421	421	.....	83
Louisiana	2,552	2,399	2,326	......	73	153	128	105	100	5	23
Maine	1,493	1,481	1,481	......	...	12	376	376	376	.....	.....
Maryland	4,035	2,992	2,992	......	...	1,043	708	688	688	.....	20
Massachusetts	14,096	13,750	13,654	......	96	346	3,213	3,129	3,129	.....	84
Michigan	7,377	7,294	6,493	741	60	83	1,632	1,596	1,590	6	36
Minnesota	5,857	5,830	5,830	......	...	27	1,372	1,336	1,336	.....	36
Mississippi	2,024	2,024	2,024	......	...	.....	154	154	154	.....	.....
Missouri	7,512	7,061	4,792	2,269	...	451	633	574	444	130	59
Montana	1,083	1,083	1,083	......	...	.....	83	83	83	.....	.....
Nebraska	2,485	2,446	2,446	......	...	39	551	538	538	.....	13
Nevada	244	244	244	......	...	.....	......	......	......	.....	.....
New Hampshire	1,098	1,098	1,098	......	...	.....	374	374	374	.....	.....
New Jersey	7,592	7,538	4,326	3,212	...	54	1,298	706	564	142	592
New Mexico	302	302	302	......	...	.....	5	5	5	.....	.....
New York	38,117	36,894	36,761	......	133	1,223	5,525	5,321	3,311	2,010	204
North Carolina	3,446	3,404	3,404	......	...	42	205	201	201	.....	4
North Dakota	1,079	1,079	1,079	......	...	.....	276	276	276	.....	.....
Ohio	12,307	12,134	12,108	......	26	173	2,199	2,184	2,184	.....	15
Oklahoma	2,758	2,740	2,740	......	...	18	708	704	704	.....	4
Oregon	2,309	2,112	2,112	......	...	197	372	335	335	.....	37
Pennsylvania	19,436	17,582	9,522	7,923	137	1,854	4,361	3,227	2,925	302	1,134
Rhode Island	1,565	1,423	1,423	......	...	142	244	241	241	.....	3
South Carolina	1,642	1,642	1,642	......	...	.....	139	139	139	.....	.....
South Dakota	1,059	1,059	1,059	......	...	.....	317	317	317	.....	.....
Tennessee	2,518	2,493	2,216	277	...	25	27	11	......	11	16
Texas	5,033	4,880	4,880	......	...	153	77	50	50	.....	27
Utah	474	474	474	......	...	.....	66	66	66	.....	.....
Vermont	1,110	668	668	......	...	442	69	59	59	.....	10
Virginia	4,398	4,398	4,398	......	...	.....	353	257	257	.....	96
Washington	3,312	3,303	3,303	......	...	9	550	550	550	.....	.....
West Virginia	2,127	2,127	2,127	......	...	.....	98	98	98	.....	.....
Wisconsin	7,879	7,616	1,335	6,281	...	263	1,477	1,355	1,138	217	122
Wyoming	220	220	220		...		94	94	94		

Table I—Continued

Insane, feebleminded, epileptics and inebriates in institutions in the several states of the Union on January 1, 1917

State	Epileptics not included among insane or feebleminded					Inebriates				
	Total	Public			Private	Total	Public			Private
		Total	State institutions	Other institutions			Total	State institutions	Other institutions	
United States	10,801	10,394	9,935	459	407	4,891	3,991	3,086	905	900
Alabama	......	......	.....	...	...	.....	.....	.....	...	...
Arizona	16	16	16	...	...	5	5	5	...	...
Arkansas	212	212	212	...	...	22	22	22	...	...
California	15	10	8	2	5	362	338	322	16	24
Colorado	140	133	133	...	7	19	5	.....	5	14
Connecticut	105	97	97	...	8	157	111	111	...	46
Delaware	5	5	5	...	...	.....	.....	.....	...	...
District of Columbia	15	15	7	8	...	40	40	10	30	...
Florida	......	......	.....	...	...	.....	.....	.....	...	...
Georgia	3	......	.....	...	3	16	3	3	...	13
Idaho	40	40	40	...	...	2	2	2	...	...
Illinois	128	118	117	1	10	827	731	731	...	96
Indiana	416	415	415	...	1	46	29	29	...	17
Iowa	57	41	1	40	16	247	243	195	48	4
Kansas	622	622	622	...	...	324	320	320	...	4
Kentucky	301	300	300	...	1	54	50	50	...	4
Louisiana	125	115	110	5	10	15	6	.....	6	9
Maine	83	33	33	...	...	51	47	47	...	4
Maryland	33	......	.....	...	33	33	.....	.....	...	33
Massachusetts	1,069	1,007	1,007	...	62	344	280	280	...	64
Michigan	358	354	346	8	4	89	72	57	15	17
Minnesota	379	379	379	...	...	147	141	141	...	6
Mississippi	76	76	76	...	...	14	14	14	...	...
Missouri	364	315	265	50	49	63	47	10	37	16
Montana	......	......	.....	...	...	6	6	6	...	...
Nebraska	5	1	1	...	4	28	24	24	...	4
Nevada	......	......	.....	...	...	.....	.....	.....	...	...
New Hampshire	......	......	.....	...	...	.....	.....	.....	...	...
New Jersey	696	688	688	...	8	365	162	24	138	203
New Mexico	4	4	4	...	...	3	3	3	...	...
New York	1,575	1,568	1,543	25	7	357	264	2	262	93
North Carolina	211	210	210	...	1	20	1	1	...	19
North Dakota	7	7	7	...	...	4	4	4	...	...
Ohio	1,602	1,602	1,602	...	...	116	83	82	1	33
Oklahoma	143	143	143	...	...	289	286	286	...	3
Oregon	4	1	1	...	3	11	3	3	...	8
Pennsylvania	645	482	302	180	163	429	342	23	319	87
Rhode Island	......	......	.....	...	...	2	.....	.....	...	2
South Carolina	188	188	188	...	...	13	6	6	...	7
South Dakota	2	2	2	...	...	.....	.....	.....	...	...
Tennessee	2	2	.....	2	...	30	3	1	2	27
Texas	514	510	510	...	4	23	.....	.....	...	23
Utah	12	12	12	...	...	.....	.....	.....	...	...
Vermont	......	......	.....	...	...	81	70	70	...	11
Virginia	314	314	314	...	...	53	53	53	...	...
Washington	......	......	.....	...	...	3	.....	.....	...	3
West Virginia	204	204	204	...	...	24	24	24	...	...
Wisconsin	146	138	.....	138	8	152	146	120	26	6
Wyoming	15	15	15	...	...	5	5	5	...	...

Table II

Comparison between increase in general population and increase in insane in institutions in the several states of the Union, from January 1, 1910 to January 1, 1917

State	General population				Insane			
	April 15, 1910	January 1, 1917*	Increase		January 1, 1910	January 1, 1917	Increase	
			Number	Per cent			Number	Per cent
United States	91,972,266	102,826,309	10,854,043	11.80	187,791	234,055	46,264	24.64
Alabama	2,138,093	2,348,273	210,180	9.83	2,039	2,341	302	14.81
Arizona	204,354	259,666	55,312	27.07	337	411	74	21.96
Arkansas	1,574,449	1,753,033	178,584	11.34	1,092	1,628	536	49.08
California	2,377,549	2,983,843	606,294	25.50	6,652	9,698	3,046	45.79
Colorado	799,024	975,190	176,166	22.05	1,199	1,613	414	34.53
Connecticut	1,114,756	1,254,926	140,170	12.57	3,579	4,180	601	16.79
Delaware	202,322	214,270	11,948	5.91	441	484	43	9.75
District of Columbia	331,069	366,631	35,562	10.74	2,890	3,082	192	6.64
Florida	752,619	904,839	152,220	20.23	849	1,482	633	74.56
Georgia	2,609,121	2,875,953	266,832	10.23	3,132	4,062	930	29.69
Idaho	325,594	436,881	111,287	34.18	388	540	152	39.18
Illinois	5,638,591	6,193,626	555,035	9.84	12,839	16,354	3,515	27.38
Indiana	2,700,876	2,826,154	125,278	4.64	4,527	5,769	1,242	27.44
Iowa	2,224,771	2,224,771			5,377	6,367	990	18.41
Kansas	1,690,949	1,840,707	149,758	8.86	2,912	3,157	245	8.41
Kentucky	2,289,905	2,386,866	96,961	4.23	3,538	4,348	810	22.89
Louisiana	1,656,388	1,843,042	186,654	11.27	2,158	2,552	394	18.26
Maine	742,371	774,914	32,543	4.38	1,258	1,493	235	18.68
Maryland	1,295,346	1,368,240	72,894	5.63	3,220	4,035	815	25.31
Massachusetts	3,366,416	3,747,564	381,148	11.32	11,601	14,096	2,495	21.51
Michigan	2,810,173	3,074,560	264,387	9.41	6,699	7,377	678	10.12
Minnesota	2,075,708	2,296,024	220,316	10.61	4,744	5,857	1,113	23.46
Mississippi	1,797,114	1,964,122	167,008	9.29	1,978	2,024	46	2.33
Missouri	3,293,335	3,420,143	126,808	3.85	6,168	7,512	1,344	21.79

* Estimates of the United States Census Bureau.

Table II—Continued

Comparison between increase in general population and increase in insane in institutions in the several states of the Union, from January 1, 1910 to January 1, 1917

State	General population				Insane			
	April 15, 1910	January 1, 1917*	Increase		January 1, 1910	January 1, 1917	Increase	
			Number	Per cent			Number	Per cent
Montana	376,053	466,214	90,161	23.98	697	1,083	386	55.38
Nebraska	1,192,214	1,277,750	85,536	7.17	1,990	2,485	495	24.87
Nevada	81,875	108,736	26,861	32.81	230	244	14	6.09
New Hampshire	430,572	443,467	12,895	2.99	909	1,098	189	20.79
New Jersey	2,537,167	2,981,105	443,938	17.50	6,042	7,592	1,550	25.65
New Mexico	327,301	416,966	89,665	27.40	219	302	83	37.90
New York	9,113,614	10,366,778	1,253,164	13.75	31,280	38,117	6,837	21.86
North Carolina	2,206,287	2,418,559	212,272	9.62	2,522	3,446	924	36.64
North Dakota	577,056	752,260	175,204	30.36	628	1,079	451	71.82
Ohio	4,767,121	5,181,220	414,099	8.69	10,594	12,307	1,713	16.17
Oklahoma	1,657,155	2,245,968	588,813	35.53	1,110	2,758	1,648	148.47
Oregon	672,765	848,866	176,101	26.18	1,565	2,309	744	47.54
Pennsylvania	7,665,111	8,591,029	925,918	12.08	15,058	19,436	4,378	29.07
Rhode Island	542,610	620,090	77,480	14.28	1,243	1,565	322	25.91
South Carolina	1,515,400	1,634,340	118,940	7.85	1,541	1,642	101	6.55
South Dakota	583,888	707,740	123,852	21.21	864	1,059	195	22.57
Tennessee	2,184,789	2,296,316	111,527	5.10	2,204	2,518	314	14.25
Texas	3,896,542	4,472,494	575,952	14.78	4,053	5,033	980	24.18
Utah	373,351	438,974	65,623	17.58	342	474	132	38.60
Vermont	355,956	364,322	8,366	2.35	990	1,110	120	12.12
Virginia	2,061,612	2,202,522	140,910	6.83	3,635	4,398	763	20.99
Washington	1,141,990	1,565,810	423,820	37.11	1,987	3,312	1,325	66.68
West Virginia	1,221,119	1,399,320	178,201	14.59	1,722	2,127	405	23.52
Wisconsin	2,333,860	2,513,758	179,898	7.71	6,587	7,879	1,292	19.61
Wyoming	145,965	182,264	36,299	24.87	162	220	58	35.80

* Estimates of the United States Census Bureau.

Table III

Insane in institutions in the United States by divisions and states, January 1, 1910 and January 1, 1917

Divisions and states	Number		Rate per 100,000 of general population	
	January 1, 1910	January 1, 1917	January 1, 1910	January 1, 1917
United States	187,791	234,055	204.2	227.6
New England	19,580	23,542	298.8	326.7
Maine	1,258	1,493	169.5	192.7
New Hampshire	909	1,098	211.1	247.6
Vermont	990	1,110	278.1	304.7
Massachusetts	11,601	14,096	344.6	376.1
Rhode Island	1,243	1,565	229.1	252.4
Connecticut	3,579	4,180	321.1	333.1
Middle Atlantic	52,380	65,145	271.2	296.9
New York	31,280	38,117	343.2	367.7
New Jersey	6,042	7,592	238.1	254.7
Pennsylvania	15,058	19,436	196.4	226.2
East North Central	41,246	49,686	226.0	251.1
Ohio	10,594	12,307	222.2	237.5
Indiana	4,527	5,769	167.6	204.1
Illinois	12,839	16,354	227.7	264.0
Michigan	6,699	7,377	238.4	239.9
Wisconsin	6,587	7,879	282.2	313.4
West North Central	22,683	27,516	194.9	219.8
Minnesota	4,744	5,857	228.5	255.1
Iowa	5,377	6,367	241.7	286.2
Missouri	6,168	7,512	187.3	219.6
North Dakota	628	1,079	108.8	143.4
South Dakota	864	1,059	148.0	149.6
Nebraska	1,990	2,485	166.9	194.5
Kansas	2,912	3,157	172.2	171.5
South Atlantic	19,952	24,758	163.6	185.0
Delaware	441	484	218.0	225.9
Maryland	3,220	4,035	248.6	294.9
District of Columbia	2,890	3,082	872.9	840.6
Virginia	3,635	4,398	176.3	199.7
West Virginia	1,722	2,127	141.0	152.0
North Carolina	2,522	3,446	114.3	142.5
South Carolina	1,541	1,642	101.7	100.5
Georgia	3,132	4,062	120.0	141.2
Florida	849	1,482	112.8	163.8
East South Central	9,759	11,231	116.0	124.9
Kentucky	3,538	4,348	154.5	182.2
Tennessee	2,204	2,518	100.9	109.7
Alabama	2,039	2,341	95.4	99.7
Mississippi	1,978	2,024	110.1	103.0
West South Central	8,413	11,971	95.8	116.1
Arkansas	1,092	1,628	69.4	92.9
Louisiana	2,158	2,552	130.3	138.5
Oklahoma	1,110	2,758	67.0	122.8
Texas	4,053	5,033	104.0	112.5

Table III—Continued

utions in the United States by divisions and states,
uary 1, 1910 and January 1, 1917

d states	Number		Rate per 100,000 of general population	
	January 1, 1910	January 1, 1917	January 1, 1910	January 1, 1917
ntain	3,574	4,887	135.7	148.8
Montana	697	1,083	185.3	232.3
Idaho	388	540	119.2	123.6
Wyoming	162	220	111.0	120.7
Colorado	1,199	1,613	150.1	165.4
New Mexico	219	302	66.9	72.4
Arizona	337	411	164.9	158.3
Utah	342	474	91.6	108.0
Nevada	230	244	280.9	224.4
Pacific	10,204	15,319	243.4	283.8
Washington	1,987	3,312	174.0	211.5
Oregon	1,565	2,309	232.6	272.0
California	6,652	9,698	279.8	325.0

Table IV

Number of insane in institutions in the United States with rates per 100,000 of general population in 1890, 1904, 1910 and 1917

State	June 1, 1890		January 1, 1904		January 1, 1910		January 1, 1917	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
United States	106,485	170.0	150,151	183.6	187,791	204.2	234,055	227.6
Alabama	1,469	97.1	1,603	82.6	2,039	95.4	2,341	99.7
Arizona	64	107.3	224	146.9	337	164.9	411	158.3
Arkansas	790	70.0	667	47.4	1,092	69.4	1,628	92.9
California	3,736	309.2	5,717	316.0	6,652	279.8	9,698	325.0
Colorado	326	79.1	754	119.0	1,199	150.1	1,613	165.4
Connecticut	2,056	275.5	2,831	287.9	3,579	321.1	4,180	333.1
Delaware	197	116.9	353	184.7	441	218.0	484	225.9
District of Columbia	1,578	684.9	2,453	823.9	2,890	872.9	3,082	840.6
Florida	351	89.7	713	116.9	849	112.8	1,482	163.8
Georgia	1,815	98.8	2,839	120.4	3,132	120.0	4,062	141.2
Idaho	83	98.4	255	115.3	388	119.2	540	123.6
Illinois	6,641	173.6	9,607	187.7	12,839	227.7	16,354	264.0
Indiana	3,291	150.1	4,358	168.7	4,527	167.6	5,769	204.1
Iowa	3,197	167.2	4,385	196.7	5,377	241.7	6,367	286.2
Kansas	1,794	125.7	2,460	158.7	2,912	172.2	3,157	171.5
Kentucky	2,729	146.8	3,058	139.1	3,538	154.5	4,348	182.2
Louisiana	910	81.4	1,585	107.0	2,158	130.3	2,552	138.5
Maine	1,299	196.5	885	124.3	1,258	169.5	1,493	192.7
Maryland	1,646	157.9	2,505	204.2	3,220	248.6	4,035	294.9
Massachusetts	6,103	272.6	8,679	288.4	11,601	344.6	14,096	376.1
Michigan	3,725	177.9	5,430	211.9	6,699	238.4	7,377	239.9
Minnesota	2,205	169.4	4,070	217.8	4,744	228.5	5,857	255.1
Mississippi	1,104	85.6	1,493	91.0	1,978	110.1	2,024	103.0
Missouri	3,418	127.6	5,103	160.8	6,168	187.3	7,512	219.6

Table IV—Continued

Number of insane in institutions in the United States with rates per 100,000 of general population in 1890, 1904, 1910 and 1917

State	June 1, 1890		January 1, 1904		January 1, 1910		January 1, 1917	
	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000	Number	Rate per 100,000
Montana	192	145.3	543	186.3	697	185.3	1,083	232.3
Nebraska	932	88.0	1,536	138.1	1,990	166.9	2,485	194.5
Nevada	183	399.9	200	352.8	230	280.9	244	224.4
New Hampshire	961	255.2	496	118.5	909	211.1	1,098	247.6
New Jersey	3,163	218.9	4,865	229.4	6,042	238.1	7,592	254.7
New Mexico	66	43.0	113	46.5	219	66.9	302	72.4
New York	17,846	297.5	26,176	329.7	31,280	343.2	38,117	367.7
North Carolina	1,725	106.6	1,883	93.8	2,522	114.3	3,446	142.5
North Dakota	221	121.0	446	108.1	628	108.8	1,079	143.4
Ohio	7,600	207.0	8,621	196.9	10,594	222.2	12,307	237.5
Oklahoma	7	11.3	413	37.4	1,110	67.0	2,758	122.8
Oregon	640	204.0	1,285	253.2	1,565	232.6	2,309	272.0
Pennsylvania	8,482	161.3	11,521	169.5	15,058	196.4	19,436	226.2
Rhode Island	795	230.1	1,077	229.2	1,243	229.1	1,565	252.4
South Carolina	912	79.2	1,156	82.3	1,541	101.7	1,642	100.5
South Dakota	310	94.3	595	127.2	864	148.0	1,059	149.6
Tennessee	1,845	104.4	1,713	82.3	2,204	100.9	2,518	109.7
Texas	1,670	74.7	3,345	99.7	4,053	104.0	5,033	112.5
Utah	166	79.8	344	110.3	342	91.6	474	108.0
Vermont	823	247.6	887	254.8	990	278.1	1,110	304.7
Virginia	2,407	145.4	3,137	162.6	3,635	176.3	4,398	199.7
Washington	380	108.8	1,178	158.2	1,987	174.0	3,312	211.5
West Virginia	1,079	141.5	1,475	139.9	1,722	141.0	2,127	152.0
Wisconsin	3,513	208.3	5,023	232.0	6,587	282.2	7,879	313.4
Wyoming	40	65.9	96	85.8	162	111.0	220	120.7

Table V
Insane in state hospitals in the United States on January 1, 1917

State	Number of state hospitals	Number of insane	
		Total	Average per state hospital
United States	156	203,206	1,303
Alabama	2	2,341	1,171
Arizona	1	411	411
Arkansas	1	1,628	1,628
California	6	9,532	1,589
Colorado	1	1,493	1,493
Connecticut	2	3,846	1,923
Delaware	1	484	484
District of Columbia	1	3,058	3,058
Florida	1	1,482	1,482
Georgia	1	4,009	4,009
Idaho	2	540	270
Illinois	8	16,104	2,013
Indiana	6	5,496	916
Iowa	5	4,784	957
Kansas	4	3,108	777
Kentucky	3	4,328	1,443
Louisiana	2	2,326	1,163
Maine	2	1,481	741
Maryland	4	2,992	748
Massachusetts	12	13,654	1,138
Michigan	5	6,493	1,299
Minnesota	5	5,830	1,166
Mississippi	2	2,024	1,012
Missouri	4	4,792	1,198
Montana	1	1,083	1,083
Nebraska	3	2,446	815
Nevada	1	244	244
New Hampshire	1	1,098	1,098
New Jersey	2	4,326	2,163
New Mexico	1	302	302
New York	15	36,761	2,451
North Carolina	4	3,404	851
North Dakota	1	1,079	1,079
Ohio	8	12,108	1,514
Oklahoma	3	2,740	913
Oregon	2	2,112	1,056
Pennsylvania	7	9,522	1,360
Rhode Island	1	1,423	1,423
South Carolina	1	1,642	1,642
South Dakota	*2	1,059	530
Tennessee	3	2,216	739
Texas	3	4,880	1,627
Utah	1	474	474
Vermont	1	668	668
Virginia	4	4,398	1,100
Washington	3	3,303	1,101
West Virginia	3	2,127	709
Wisconsin	3	1,335	445
Wyoming	1	220	220

* Includes Asylum for Insane Indians.

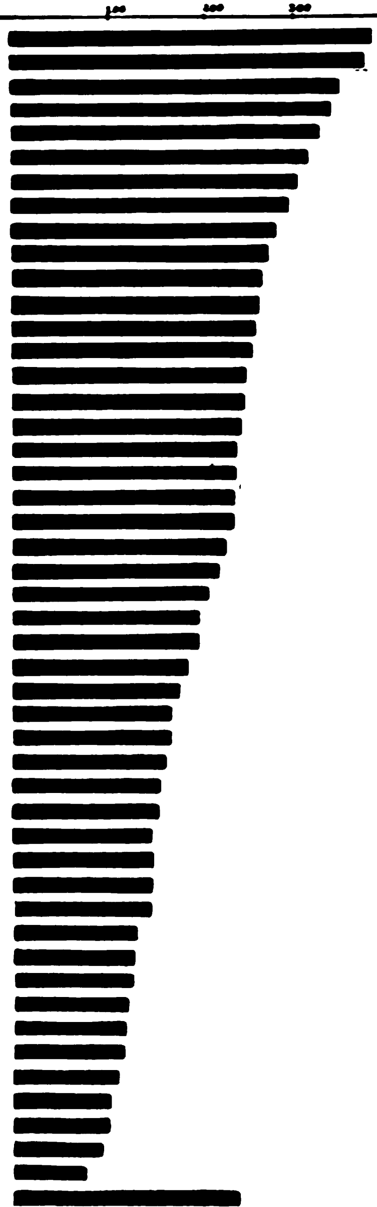
Table VI Comparison between feebleminded in institutions in the several states of the Union on January 1, 1910, and January 1, 1917

State	January 1, 1910	January 1, 1917	Increase	
			Number	Per cent
United States	20,731	37,220	16,489	79.54
Alabama	......	......	......	......
Arizona	......	50	50	......
Arkansas	......	165	165	......
California	854	1,294	440	51.52
Colorado	64	224	160	250.00
Connecticut	294	438	144	48.98
Delaware	......	30	30	......
District of Columbia	......	143	143	......
Florida	......	......	......	......
Georgia	......	4	4	......
Idaho	......	61	61	......
Illinois	1,265	2,305	1,040	82.21
Indiana	1,135	1,523	388	34.19
Iowa	1,189	1,772	583	49.03
Kansas	420	1,053	633	150.71
Kentucky	283	504	221	78.09
Louisiana	......	128	128	......
Maine	62	376	314	506.45
Maryland	310	708	398	128.39
Massachusetts	1,464	3,213	1,749	119.47
Michigan	986	1,632	646	65.52
Minnesota	1,194	1,372	178	14.91
Mississippi	......	154	154	......
Missouri	512	633	121	23.63
Montana	51	83	32	62.75
Nebraska	446	551	105	23.54
Nevada	......	......	......	......
New Hampshire	144	374	230	159.72
New Jersey	640	1,298	658	102.81
New Mexico	......	5	5	......
New York	3,421	5,525	2,104	61.50
North Carolina	......	205	205	......
North Dakota	145	276	131	90.34
Ohio	1,526	2,199	673	44.10
Oklahoma	......	708	708	......
Oregon	......	372	372	......
Pennsylvania	2,705	4,361	1,656	61.22
Rhode Island	48	244	196	408.33
South Carolina	......	139	139	......
South Dakota	*......	317	......	......
Tennessee	47	27	†20	†42.55
Texas	19	77	58	305.26
Utah	45	66	21	46.67
Vermont	......	69	69	......
Virginia	60	353	293	488.33
Washington	159	550	391	245.91
West Virginia	214	98	†116	†54.21
Wisconsin	1,029	1,477	448	43.54
Wyoming	......	64	64	......

*No reports.

†Decrease.

INSANE IN INSTITUTIONS IN THE UNITED STATES, PER 100,000 OF POPULATION ON JANUARY 1, 1917



1	MASSACHUSETTS	376.1
2	NEW YORK	367.7
3	CONNECTICUT	333.1
4	CALIFORNIA	325.0
5	WISCONSIN	313.4
6	VERMONT	304.7
7	MARYLAND	294.9
8	IOWA	286.2
9	OREGON	272.0
10	ILLINOIS	264.0
11	MINNESOTA	255.1
12	NEW JERSEY	254.7
13	RHODE ISLAND	252.4
14	NEW HAMPSHIRE	247.6
15	MICHIGAN	239.9
16	OHIO	237.5
17	MONTANA	232.3
18	PENNSYLVANIA	226.2
19	DELAWARE	225.9
20	NEVADA	224.4
21	MISSOURI	219.6
22	WASHINGTON	211.5
23	INDIANA	204.1
24	VIRGINIA	199.7
25	NEBRASKA	194.5
26	MAINE	192.7
27	KENTUCKY	182.2
28	KANSAS	171.5
29	COLORADO	165.4
30	FLORIDA	163.8
31	ARIZONA	158.3
32	WEST VIRGINIA	152.0
33	SOUTH DAKOTA	149.6
34	NORTH DAKOTA	143.4
35	NORTH CAROLINA	142.5
36	GEORGIA	141.2
37	LOUISIANA	138.5
38	IDAHO	123.6
39	OKLAHOMA	122.8
40	WYOMING	120.7
41	TEXAS	112.5
42	TENNESSEE	109.7
43	UTAH	108.0
44	MISSISSIPPI	103.0
45	SOUTH CAROLINA	100.5
46	ALABAMA	99.7
47	ARKANSAS	92.9
48	NEW MEXICO	72.4
	UNITED STATES	227.6

ALIENISTS AND PSYCHIATRISTS

NOTES ON DIVISIONS AND NOMENCLATURE OF MENTAL HYGIENE

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INSANITY and mental disease are not synonymous. Insanity is a legal concept; mental disease is a medical concept.

A man is either sane or insane or indeterminate as to sanity; and there are no degrees of sanity or insanity. There is but one degree and but one kind of sanity or of insanity.

There are all degrees of mental health and mental disease. There are many kinds of mental disease.

Insanity depends upon medicolegal decisions. Mental disease is an affair of medicine alone. Sanity and mental health, decided by law and medicine respectively, characterize the same human subjects; but sanity also characterizes many subjects of mental disease. Sane subjects of mental disease are subject to mental diseases—either mild or severe—that are of a kind that does not concern the courts.

It would even be entirely permissible to say that no man is either sane or insane until properly reviewed and adjudged by courts. Such is not the point here at issue. It is enough to claim that sanity and insanity are characters such that courts decide them within the limitations of accuracy of courts.

Sanity and insanity accordingly are legal, governmental, public matters. Mental health and disease are matters of individual medicine and individual psychology, and, while of familial, district, group, or social interest, they do not necessarily approach governmental régime. Insanity is a public matter; mental disease a social, family or personal matter.

The above are commonplaces in the minds of many, perhaps of the most, advanced medical men. It is probable that many competent jurists hold identical conceptions.

I therefore propose that the medical specialists who are medicolegal aids be given the familiar and etymologically appropriate designation *alienists* and that the term *psychiatrists* be reserved for those specialists that are acting as physicians only—that the insanity expert be spoken of as an alienist and that the mental disease expert be called a psychiatrist.

Reports could then run:

1. "As alienist, I consider this person insane. As psychiatrist, I consider this patient subject to general paresis," or

2. "As alienist, I consider this person sane. As psychiatrist, I consider him in complete mental health," or

3. "As alienist, I consider this person sane. As psychiatrist, I consider him subject to mental disease, viz., subject to a psychoneurosis of hysterical form," or

4. "As alienist, I consider this person sane. As psychiatrist, I consider him subject to dementia praecox in a mild degree," or

5. "As alienist, I consider this person sane. As psychiatrist, I consider him subject to paranoia of great severity. This mental disease (which I find as psychiatrist) I regard, in this case, as of no public interest (when I review the findings as alienist)."

These points and some others that may not be worth full presentation are given in parallel columns:

Alienists	*Psychiatrists*
Field: insanity, the insane.	Field: psychiatry, the mentally diseased.
Field: public, governmental, legal.	Field: social, private, medical.
Field: opinion for court use.	Field: medical, psychological, and social diagnosis and treatment.
Decisions alternative: Sanity *versus* insanity.	Decisions selective: *e. g.*, syphilitic, feeble-minded, epileptic, alcoholic, coarse brain disease, symptomatic, senescent-senile, schizophrenic, cyclothymic, psychoneurotic, etc.[1]
Insanity implies mental disease.	Sanity consistent with mental disease of mild degree or of special type.
Sanity: Insanity = 1: 0.	Mental disease of all degrees of many kinds

The major divisions of mental hygiene[2] from a practical point of view are three:

1. *Public, i. e.*, governmental, legal, forensic, statutory, official.
2. *Social, i. e.*, voluntary, privately managed, charitable, philanthropic, propagandist, prelegislative, auxiliary, initiative.
3. *Individual, i. e.*, personal, private, object of medical diagnosis and treatment, having two subdivisions:
    - a Medical (in a narrow sense), psychiatric.
    - b Medical (in a broader sense), psychopathological, employing both metric ("mental test") and qualitative (*e. g.*, analysis of instincts) methods.

Accepting these divisions of mental hygiene as approximations to modern view, I would now query whether the prevalent distinction between insanity and mental disease should not be followed by a corresponding improvement in the terms describing the public and non-public experts in mental hygiene. On the forensic side of the public division of mental hygiene, let the alienist hold sway. In other divisions of mental hygiene than the public division, let the psychiatrist work. Let both psychiatrists and alienists be mental hygienists.

Mental hygiene shows signs of being a larger category than psychiatry, working out an evolution somewhat like that of hygiene in general with respect to medicine. We see signs of the following specialties in mental hygiene developing:

1. *Institutional mental hygiene*, chiefly public, officially regulative, economic, state care, interstate relations, standardizing, statistical, architectural, engineering, sanitational.
2. *Forensic or medicolegal psychiatry* (The *psychiatric* features at a minimum, the legal at the maximum: experts here proposed to be named alienists, dealing with questions of alienation ("*alienistics*"?) not primarily with psychiatric questions).
3. *Practical psychiatry* (Forensic aspects remote, medical diagnosis and treatment dominant, home and dispensary treatment encouraged, psychopathic hospital encouragement of "voluntary" and "temporary care" relations of mental patients to ward treatment).

Somewhat newer and promising specialties are these:

4. *Metric psychiatry* (Psychological psychiatry, *i. e.*, a psychiatry that uses methods developed by psychologists, commonly called "mental tests," for the purpose of the psychiatrist's diagnosis not merely in the field of feeblemindedness but broadly in the study of deterioration, to determine degrees of both "mind-lack" and "mind-loss"; of value also in the third field, "mind-twist," for the exclusion of lacks and losses).
5. *Social psychiatry* (Developing from a conjugation of social and psychiatric concepts, as social psychology has already developed from a conjugation of social and psychological concepts—employing modern methods of social service investigation and care [3] and aiming to make use of characterological and ethological categories and the available facts of the psychology of the instincts, behaviorism, vocational psychology, and the like).

Concerning 5. *Social psychiatry*, it may well be claimed that a good portion of it is nothing but pious wish. At any rate, it might be maintained, should we not separate the comparatively certain field of psychiatric social service (in which, *e. g.*, several American clinics are getting solid results) from that darkling portion of social psychiatry that lies next to social psychology? Perhaps.

A brief schema of specialties made and in the making would comprise:

MENTAL HYGIENE

1. Public Division:
   A. Institutions.
   B. Forensic Psychiatry ("Alienistics"?).

2. Social Division:
  A. Psychiatric Social Service.
  B. Character Handicap Work.
3. Personal Medical Division:
  A. Practical Psychiatry.
  B. Metric Psychiatry ("Mental Tests").

I suppose it would be superfluous to add that these divisions, though they correspond to experts developed and being developed, do not imply true disjunction of material or technique. These experts are all dealing with melioristic aims and all use each other's evidence and technique.

It should also be redundant to say that any great further advance in mental hygiene and melioristics[4] hangs, like all advance in the past, on investigation and research.

CONCLUSIONS

It is proposed that the term *alienist* be used of experts in the forensic or medicolegal subdivision of mental hygiene, dealing with *insanity*.

It is proposed that the term *psychiatrist* be used of medical experts concerned with *mental diseases*.

As a minor point in nomenclature, it is proposed to distinguish the *alienistics* of a case from the *psychiatry* thereof. As insanity stands to mental disease, so alienistics would stand to psychiatry. Alienistics would be primarily a branch of law, psychiatry a branch of medicine.

Five or six subdivisions of mental hygiene are mentioned as existent or developing.

Public mental hygiene has the two well-established subdivisions, institutional and medicolegal.

Social mental hygiene has produced effective social service. It is a question how far character handicap work can go; but there are signs of a specialty in mental hygiene here also, using practical psychiatric, social-service and social-psychological categories.

Personal or *individual* (medical) mental hygiene is founded on the achievements of practical psychiatry which may now be regarded as a specialty independent of institutional mental hygiene and of "alienistics." But metric psychiatry is gaining ground, following the work of Binet, and "mental tests" promise to be of value not only in "mind-lack" and "mind-loss" questions of practical psychiatry but also (at least negatively) in the field of character handicap work in employment and vocational choice.

REFERENCES

[1] Southard. A Key to the Practical Grouping of Mental Diseases. Transactions, American Neurological Association, 1917. Contains reasons, briefly stated, for the groups and sequence of groups mentioned in the text.

[2] Southard. The Major Divisions of Mental Hygiene: Public, Social, Individual. *Boston Medical and Surgical Journal*, Vol. CLXXV, No. 12, pp. 404-406, Sept. 21, 1916.

[3] Southard. Zones of Community Effort in Mental Hygiene. Proceedings, National Conference of Charities and Correction, Pittsburgh, 1917.

[4] Southard. Social Research in Public Institutions. Proceedings, National Conference of Charities and Correction, Indianapolis, 1916.

THE MENTAL HEALTH OF THE COMMUNITY AND THE WORK OF THE PSYCHIATRIC DISPENSARY*

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THE unfortunate patient, who suffers from one of the countless ills to which human flesh is heir, as a rule has insight into his condition and knows in a general way where to get help; even though unable to pay special fees he can go to a special clinic such as the eye clinic, or can consult the dispensary of the general hospital, where he is referred to the suitable special department. The nature of the work of each special department is familiar in its general outline to the man in the street.

The situation is somewhat different with regard to the department that deals with mental disorders; the public and even the medical profession are here not so well informed. The patient suffering from a mental disorder may have no inkling of his sickness; the family and social agencies frequently fail to realize that the situation is one demanding expert medical advice. It is important, therefore, to diffuse more widely the knowledge of what help is offered by a psychiatric dispensary, and of what type of cases should be brought there.

To many the name "psychiatric dispensary" suggests little or nothing; the term "mental clinic" or "mental out-patient department" sounds more familiar, and yet even so simple a term may call up in the minds of many a very misleading picture. Although living in the twentieth century, we are not free from the trammels of medieval thought. We are apt to deal with words, the symbols of reality, rather than with the facts of experience. So the term mental disorder, like the legal term insanity, has a certain ominous ring about it which makes people tend to avoid it.

It is well, therefore, to begin by freeing our minds from some general misconceptions before passing on to the presentation of concrete facts. Mental disorders are disorders of human adjustment, maladaptations, unhygienic compromises, immature or distorted methods of meeting the complex situations of life. The mental out-patient clinic or psychiatric dispensary deals with such disorders of adjustment; it deals with the failures of the individual to meet life's problems. Unlike internal medicine, psychiatry cannot limit itself to the failure of single organs or groups of organs to deal with their problems; it has to deal with the maladjustments of the personality as a whole. Psychiatry may therefore be considered as personal medicine, as opposed to impersonal medicine; while in other departments the personality may be ignored, although not always with impunity, in the mental clinic the personality is the organic unit with which we work. It is true that disorders of the individual organs and of groups of organs may cause modifications of the personality. The personality is not something outside of and apart from the constituent organs of the body; it is the total activity of these organs more adequately conceived. The study of the personality and its disorders involves the study of all the bodily organs, but in a more complete setting than is necessary in internal medicine.

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* Read before the Mental Hygiene section of the National Conference of Charities and Correction, Pittsburg, June 12, 1917.

In the mental clinic, therefore, we deal with patients whose symptoms require for their understanding a study of the personality and of its problems. Mental disorders are not disorders whose symptoms necessarily are mental, but whose *roots* are mental, that is whose roots cannot be understood without studying the patient in his complete human relations. The symptoms may be insomnia, or headache, or vomiting; they may consist of a paralysis or a tremor; they may be limited to an apparent blindness or deafness or dumbness; and yet the disorder may be a mental disorder because its roots lie in the difficulty the personality has in its adjustment to the situation. The personality, in the face of difficulties, may find refuge in phantasies, deliria or hallucinations, but also in aches and pains and palsies, and the latter may be as truly evidence of mental disorder as the former.

Symptoms such as paralysis or blindness may be the signal of a complex human difficulty while the individual organs are sound; on the other hand changes of personality, moods, hallucinations and delusions may be the sign of the disorder of some individual organ or group of organs. The organs involved may be the central nervous system, the glands which are at the very basis of the emotional life, or some other organ such as the stomach, or lungs. Where the personality is involved in this secondary way the mental symptoms are merely symptomatic of disorders, the study and treatment of which can be carried on along the narrower lines of internal medicine.

A survey of the actual work done in the psychiatric dispensary may begin properly with the children; these may be divided conveniently into the subnormal and the neurotic group.

With regard to the former group, the early recognition and complete study of any constitutional defect is extremely important; this enables the physician to advise the teacher, to guide the mother, to safeguard the child from deleterious influences, from drifting into unhealthy or delinquent habits, from becoming the tool of the unscrupulous. Pronounced backwardness at school without obvious cause is a sufficient indication that a psychiatric examination is required.

The neurotic group is composed of those children who show such symptoms as night-terrors, bed-wetting, tantrums of temper, excessively fidgety behavior, poor sexual habits, pilfering, romancing, unexplained moods, marked cruelty or other anomalous traits of character.

In every case the physician aims first at a thorough study of the child from the point of view of his physique, his intelligence, his emotional life and general balance; and then at a study of the influence of the environment on the formation of habits of the child. With the teacher he discusses the school situation; with the parent he has to review carefully the home behavior of the child, the development of the neurotic traits, and the conditions which may influence them. The individual child thus may get help, symptoms be relieved, improper habits checked; but an important by-product is that the teacher gains a broader conception of the nature of education, the parent a deeper insight into the problem of training the child—a task often so honestly taken up and so inefficiently carried out.

In order that the teacher may furnish essential data to the dispensary physician, the latter should supply simple forms in which the important facts can be briefly entered; the teacher may then learn to fill in such a form, not as a burdensome routine duty but with the same interest with which the physician makes his notes. Similar co-operation should be obtained from all social workers dealing with the problems of childhood, when they bring one of their wards to the dispensary for examination. This of course applies equally where the ward is a child, a wayward adult, or delinquent, or drug addict. The social worker should realize the importance of a psychiatric opinion on such cases, and should prepare the available data with some insight into the requirements of the physician; while the latter, in the light of these data and the examination of the individual, should be prepared to furnish the worker an opinion, which will make the actual management of the case more efficient. Such work will be a source of instruction to the individual worker; it will make less haphazard and more firmly based on rational principles the work of many organizations dealing with prisoners, unmarried mothers, juvenile delinquents, and dependents of other types. Work of this type will do much to instruct the whole community as to the underlying causes of these disorders of conduct and the necessity of dealing with them at an early stage, that is, in the school period.

The adult patients of the dispensary present a great variety of practical problems. Sometimes the problems are those of the general dispensary; that is especially true where the mental symptoms point to some underlying disease, either of the central nervous system (*e. g.*, brain tumor) or of some other organ or group of organs (*e. g.*, exophthalmic goitre). But in a large group of cases the symptoms are intimately associated with personal difficulties of adjustment, and a thorough study has to be made of the whole attitude and balance of the patient, and of the life-situation in which he finds himself.

A painstaking review and discussion of those factors, which make for happiness or unhappiness in life, is often a relief and revelation to patients, whose ailments have hitherto been treated in the traditional impersonal way by drugs, rest-cures, and operative measures.

Thus a young man came prepared to enter the hospital for the treatment of persistent headache; the headache was associated with worry over faulty sexual habits. A frank discussion of the whole situation relieved his mind considerably; he was encouraged to improve his adaptation outside rather than to take refuge in the hospital. Accordingly, a somewhat uncongenial environment was given up for residence in town, suitable employment was found, the patient took up the regular gymnasium work of the Y. M. C. A. along with other recreation in the evening. Since then the patient's attitude toward life has been transformed from one of sensitive seclusiveness to a much more healthy outlook; instinctive control is satisfactory; headache is no longer spontaneously referred to, while his improvement has been an enormous relief to his family. Encouraged by the improvement of the patient, a brother has also sought advice.

While the aim of the treatment is the readjustment of the patient to the environment, the method is largely re-educational; at the same time, such general measures as drugs, diet and baths are not neglected. Re-education of the patient means that he studies his own personal difficulties in a rather intensive way assuming he has the requisite intelligence ; he traces out the factors which have influenced his habits and attitudes; he learns to face the facts of his life in their biological crudity as well as in their ethical and aesthetic setting; he gains courage to discard mental makeshifts and disguises.

But this gain in honest insight into the problems of life must not be a barren intellectual exercise; it must go hand in hand with a search for those practical aids to the formation of better habits which the community may offer, and must be accompanied by the actual utilization of these aids. In the daily and weekly program the varied needs of human nature must get sufficient recognition; work should yield its own return, opportunities for recreation should be available, the social, intellectual, aesthetic and religious aspects of life must not be ignored; balancing factors in the way of hobbies are to be encouraged, and the fundamental relations of the patient to his own family are of cardinal importance. While the physician with his special knowledge helps the patient to unravel his tangles, the trained social service worker plays an essential rôle in directing the first steps of the patient. It is the aim of this communication to outline this work and illustrate it.

A girl of twenty-one with a slight physical deformity took it very seriously to heart, saw her life as without any promise, and harped on a number of physical complaints which seemed to have no adequate cause. A review of her case showed that, partly owing to personal difficulties, partly owing to faulty training and difficult circumstances, she had developed her invalidism as a protection, while her true interests found no outlet. Frequent interviews with the physician enabled her to adopt the latter's attitude toward her symptoms. At the same time the social service worker* got in touch with the patient's sister, and did much to correct the attitude of the latter, who had fostered the patient's invalidism. She put the patient in the way of developing her artistic talents by arranging for an exceptional educational opportunity. The patient was soon able to discard her protective invalidism; she has made a good start on the road to economic independence; her attitude toward life is one of cheerfulness and hope instead of discouragement and resignation, while the slight physical deformity has shrunk in her perspective from a mountain to a molehill, and as a matter of fact is not noticed by her comrades. The fact that the patient was referred to the dispensary by the physician who was consulted for the physical deformity, illustrates the benefit of the medical profession in general being trained to recognize such disorders, which are so apt to masquerade in disguise.

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* I take this opportunity to express my indebtedness to Miss S. L. Lyons, in charge of the Social Service Department of the Psychiatric Dispensary, for her assistance in the preparation of this paper.

The general social worker, too, does well to respond with some sensitiveness to anomalies of personality, and to know when to invite a psychiatric opinion before planning the life of the individual. A young woman of eighteen, with some artistic talent and superficially bright, enlisted the sympathy of a district social service worker through her story of ill-treatment at home. The latter obtained for the girl the opportunity of going to town to take up the study of art. The girl soon attracted the attention of her companions by her phantastic stories and lack of responsibility and she was brought to the psychiatric dispensary for examination. A thorough review of her condition and of her early development showed that she was constitutionally inferior, not in the sense of being intellectually defective, but in her response to ethical standards. This condition of constitutional psychopathic inferiority, which gives rise to so many legal and other difficulties, made it necessary in view of her actual behavior to have her placed in a state hospital. The well-meant endeavor of the social worker to help the patient went astray, because the former was guided rather by sentimental considerations than by trained insight into the personality of the patient. The contact of the general social worker with the psychiatric dispensary should broaden the basis of much social work and be one more step in diffusing knowledge of mental hygiene throughout the community.

The consistent and conscientious treatment of the patient means that whatever necessary conditions are indicated for the readjustment of the patient should, if possible, be placed at the patient's disposal, although the search for them takes one from the hospital into the school, the labor market, and the church. The concrete needs of the individual patient have to be defined and support. By that we do not mean that the situation is made too easy for the patient, nor that the patient is encouraged to become dependent on the support of the clinic. But the patient must be given more than general directions, must at first be led perhaps, until the way is more familiar.

To make the steps and nature of the treatment clear, further individual cases may be quoted. A woman of twenty-six for several years had complained of severe headache, dizziness, vomiting, burning pains, insomnia and nervous feelings; the physician who had treated her by the usual medical measures for a long period without result recognized the true nature of the case and transferred her to the psychiatric dispensary. The mental roots of the disorder were not difficult to discover, and the mental hygiene of the patient was placed on a better basis. She was sensitive about her ignorance of English; she got little satisfaction from her few household duties; she squandered much time and energy in day-dreaming.

Under the stimulus of the social worker, she was encouraged to take systematic lessons in English; she became a member of a gymnasium class at the Public Athletic League; she joined the swimming class; she learned to develop her home responsibilities, attended the weekly occupation class at the psychiatric dispensary, and did some volunteer social service work. When the patient first came under observation her condition was such that admission to a state hospital was seriously considered and would have been welcomed by the husband. With the help of the measures outlined above the patient improved greatly, although leaning frequently on the social service worker. The husband was much encouraged by the improvement; his hearty co-operation in the treatment was the result of the support by the clinic, and replaced his previous resignation to the prospect of having her leave home for a long residence in a hospital.

It is often so; with the dispensary to fall back on in time of need, the husband or wife, parent or child, is often much more willing to undertake the task of looking after the patient at home.

The treatment of the patient is the treatment of the whole situation and the other members of the family must often receive psychiatric attention, as in the following case.

A man of forty-seven, with epileptiform convulsions, was suspected of malingering by the social organization which helped to support his family. Examination at the psychiatric dispensary determined the organic nature of the disorder; he was operated on in the hospital, unfortunately without relief; after leaving the hospital he continued to visit the psychiatric dispensary where he attended the weekly occupation class, his sole recreation. His wife preferred to care for him at home than to have him admitted to a state hospital. It was found that two of his children showed neurotic symptoms; they were accordingly examined, their mother was advised as to the necessary home hygiene, their school teachers were interviewed and informed of the medical opinion, gymnasium privileges were arranged for and the necessary shoes provided.

The range of the work done by the dispensary in treating adequately the situation presented by a patient is shown in the following case. A foreigner, cultured but eccentric, was referred to the dispensary from the tuberculosis clinic on account of his depressed condition; his funds were low, there had been friction with the church authorities, the fault not being altogether on his side. In view of his prejudices and somewhat difficult personality, the problem of readjustment was rather complicated. The friction with the church authorities was smoothed over, a suitable position was obtained for the patient, debts were paid in order to let him move from a quite uncongenial environment to one more suitable for him and for his children, clothing was provided for the family, artificial teeth for the wife, some literature was put at the patient's disposal, and the basis for some congenial friendships was laid. Such a series of steps may seem to stretch rather far the function of the dispensary, but so long as the therapeutic problem is taken seriously they are as essential as the individual steps in surgical or ordinary medical treatment.

From the economic standpoint the outlay in such a case comes up for scrutiny. The serious probability was that this eccentric man, with his cultural interests starved in a drab environment, unable to earn his living owing to the church friction, would show progressive embitterment and develop definite delusions. The result would then have been his admission to a state hospital, perhaps to remain for life, while his children became a charge on the community. By the measures taken, which involved an expenditure of less than two hundred dollars, he promises to become a productive economic unit, the support of the family, getting satisfaction out of life, an asset to the culture of the community. Not only is he himself happy, but the prospects for the [illegible] development of the [illegible] are [illegible]. This is [illegible] medicine.

Even in cases where the seriousness of the disorder allows only palliative treatment, the [illegible] with the patient, the physician, by giving the family an insight into the medical view of the disorder, may rob it of much of its bitterness.

One important practical decision has frequently to be made, namely, whether the patient should be placed in a hospital even without his coöperation. The relatives are apt to take the symptoms merely at their face value; the physician, however, realizes that a patient with incipient paresis may seriously compromise his name and fortune, that a patient with a mild depression may commit suicide, that a sensitive and embittered patient may suddenly commit a homicide. Impressed with these dangers he may urge the friends of the patient to take the necessary steps to have the latter admitted to a state hospital or private sanatorium. In the popular mind old associations still cling to the hospital for mental disorders; the man in the street hardly realizes that they are hospitals in the true sense of the word, specially staffed and equipped for the curative and palliative treatment of disease.

One need not blame the man in the street, for physicians and social workers often require enlightenment on this topic. In illustration, I may quote an extract from the letter of a social worker, protesting against the advice to send a young woman to a state hospital:

"From a physician's point of view, would you advise further hospital treatment outside of an insane asylum? So long as she is perfectly harmless, would she stand a better chance in a medical hospital for a little while longer, if we could so place her?" This reference to a state hospital as an insane asylum, a place which is not regarded as a medical hospital but where patients should be sent only when they cease to be harmless and can not be benefited by further treatment, illustrates a medieval trend from which contemporary thought must be purged. Where the medieval attitude still dominates the institutions of the state, it is an imperative duty of the community to see that the hospitals are brought up to a modern level.

It is not sufficient to give to the family the summary advice that commitment to a state hospital is necessary; the nature of the advice must be made clear, any prejudices removed so far as possible, the actual steps for the admission of the patient arranged with the utmost consideration for the attitude of the patient. The relation between the patient and the physician in the state hospital may be seriously compromised by injudicious management of the patient before admission; there should be no deceit; non-medical interference, such as the co-operation of the police, should be avoided except in a serious emergency, and then a plain-clothes man should be employed.

A frank attitude towards the patient may gain co-operation, even where the outlook is not promising. Thus a woman of forty-two at first rejected indignantly the advice to go to a state hospital; she had ideas of persecution, thought that she was followed by detectives, threatened to shoot her persecutor, and was incensed at the physician's guarded suggestion that her whole attitude required a detailed examination such as could only be adequately carried out in a special hospital. After two months' contact with the dispensary, she herself asked the physician to make the necessary arrangements for her admission to the state hospital. After a stay of over a year in the hospital she left it and visited the dispensary; she still clung to her old ideas and did not accept the physician's view of her sickness, but she had no resentment against him for having sent her for treatment to a mental hospital. Some months later, unable to establish herself in the community, she returned voluntarily to the state hospital.

The detailed treatment of the individual case, so far as the analysis of the symptoms and the readjustment of the patient's attitude are concerned, belongs more to a technical medical discussion than to the present review, which aims more at a discussion of the objective methods involving social co-operation. It may be helpful to mention briefly those social organizations with which the psychiatric dispensary must keep in touch, through its social service department. To a large extent they supply the machinery for the readjustment of the patient, and the problem of the psychiatric social service worker is largely to co-ordinate their individual services. Contact with these organizations to be efficient must be personal and intimate, not formal and perfunctory.

The dispensary must be in close touch with the school system and co-operate with principals and teachers, so that their problems are freely referred to the dispensary, and its advice actually carried into practice. Similar relations should exist with the juvenile court, with reform and parental schools, and with all official charity organizations, for no organization can deal adequately with the problems of dependency which does not realize the rôle played by mental defect or disorder. These organizations can not only bring their problems to the dispensary, but make a valuable social apparatus available for the readjustment of the psychiatric patient.

Such readjustment is often facilitated when the psychiatric worker is in touch with the large employers of labor and with employment bureaus, such as the new Federal Employment Bureau; the economic readjustment is often an essential part of the total task.

For the development of those human interests which are such important balancing factors in life, one must be in touch with the local opportunities for promoting self-culture, with organizations such as the night schools, the Jewish Educational Alliance, the Y. M. C. A. and the Y. W. C. A. The patient may also be grateful for some help in utilizing the other cultural opportunities of the community, the museums, libraries, picture-galleries and concerts. Simple recreative opportunities are sometimes to be found in well-run municipal dance-halls, while the humble "movies" may be recommended as an invaluable diversion in a community where the only alternative is the saloon.

For physical culture, the development of the *corpus sanum* as a fit temple for the ideal *mens sana*, one must be able to utilize the gymnasia associated with the above organizations, with several churches, with the Public Athletic League, while in summer healthy exercise and recreative diversion are combined in summer camps, perhaps under the auspices of the Boy Scouts or the Camp Fire Girls.

Where the patient has not cut himself adrift from his organic church affiliations, it is important that this most potent influence in human life should play its rôle in the readjustment or hygienic resurrection of the individual. This is to be done not by referring the patient to some hybrid organization, a blend of church and medicine, but by restoring the patient to the fellowship of that church of which he was an organic member; with his fellow-members he is entitled to get from his spiritual guide some practical help in harmonizing his highest needs with the other insistent demands of human nature. Co-operation of this type will be more generally available when those preparing to be the spiritual leaders in the community are offered, during their training, a psychology that deals with the actual conflicts of the home and the market, and not a sterilized laboratory psychology.

Here may well end our brief sketch of the organic connections of the psychiatric dispensary with the life of the community, and of the task of those who help us in building up again the structure of human lives which have been badly shaken.

"And difficult as it may be to transform the instincts that dwell in the soul, it is well that those who build not should be made aware of the joy that the others experience as they incessantly pile stone upon stone. Their thoughts and attachments, and love; their convictions, deceptions and even their doubts—all stand in good service; and when the passing storm has demolished their mansion, they build once again with the ruins, a little distance away, something less stately perhaps, but better adapted to all the requirements of life."

SUMMARY

Indigestion and headache may be mental disorders just as truly as are morbid phantasies and distorted attitudes; it depends on their origin.

The mental out-patient department or psychiatric dispensary of a hospital deals with symptoms of mental origin, whether the symptoms are called physical or mental.

The psychiatric dispensary will be of the greatest value to the community when physicians and social workers who come into contact with cases of mental disorder or defect know the type of work done there.

The teacher who promptly secures a psychiatric opinion on her subnormal and neurotic pupils, develops deeper insight into her own special educational task.

The basis of much philanthropic work can be broadened if the psychiatric dispensary is freely consulted by workers dealing with the dependents on society, delinquents, prisoners, vagrants, drug addicts, unmarried mothers, etc.

Many patients with mental symptoms have somatic disorders and present no different problems from those met in the general dispensary. Other patients do not react to the ordinary medical treatment (drugs, baths, exercise, rest, operation, etc.) because the symptoms are interwoven with the personal difficulties of the patient. The psychiatric dispensary, receiving these patients from the general dispensary or from outside physicians, helps to keep before the medical profession the importance of certain factors of health too often neglected, namely those factors which are the special province of mental hygiene.

The treatment of a patient often means his re-education, his revaluation of the various factors in life, his progress from an immature attitude to one more mature and honest. Difficulties in the life-situation of the patient which are open to modification must not be neglected. At the same time, more hygienic adaptation to the complex demands of life, the formation of better social habits, are complex tasks where supervision by an intelligent social service worker is invaluable.

The social service worker, to be of practical use to the patients, must keep in intimate personal touch with many aspects of the community life, economic, educational, philanthropic, religious and recreative.

The treatment of a patient frequently means the treatment of his whole domestic and economic situation; the thorough performance of this task is to be considered preventive medicine.

FEEBLEMINDEDNESS AND DELINQUENCY

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DURING the last few years it has been repeatedly affirmed that "every feebleminded child is a potential criminal" and that "the majority of criminals are mentally defective." These claims have been buttressed by figures purporting to show that from 50 per cent to 85 per cent and even 90 per cent of different groups of delinquents and criminals have actually proved upon examination to be feebleminded. So far as it is possible to judge from the scanty data that have been supplied in the publications (we have summarized most of the recent studies on pages 123 to 190 of the *Problems of Subnormality*), it is apparent that the examinations made in many of these studies have consisted solely of a Binet-Simon test, and the diagnoses have been based upon certain arbitrary, quantitative standards of intelligence deficiency. The surveys have almost invariably been based on selected groups of offenders, juvenile delinquents (so-called) found in juvenile courts, detention homes, and "industrial" or "training" schools, juvenile and adult prostitutes found in homes and in institutions, and juvenile and adult criminals found in jails, reformatories, and penitentiaries. Some of the adults have been 70 or 80 years of age and have undoubtedly presented various degrees of deterioration and dementia. Sometimes the person who has prepared the contribution and made the diagnoses has not examined, nor even seen, any of the cases diagnosed.

A survey of the literature on the relation of feeblemindedness to crime and delinquency reveals clearly the fact that the studies which have been made by examiners who are cautious and of sober judgment and who have brought to the work a wide experience with the feebleminded and an intimate knowledge of feeblemindedness, have yielded estimates very much more modest, usually falling below 25 per cent or 30 per cent. In fact, some of the trained examiners report only from 5 per cent to 10 per cent or 11 per cent of feebleminded cases among the delinquents whom they have examined.

Practically all of the clinics thus far established have been instituted primarily for the examination of feebleminded and backward children, and sometimes also for the children whose deportment is defective. It has seemed to the writer, however, that no better opportunity exists for the study of the relation of mental deficiency to social misconduct than is afforded by a psychological clinic connected with a large public school system. If the tendency toward misconduct, truancy, delinquency and crime is especially characteristic of feebleminded children, we should expect to find an excessively large percentage of feebleminded children among the pupils reported as difficult to manage, troublesome, truant, delinquent, thieving, vicious, or immorally or criminally inclined.

In the course of the last three years we have examined 1,363 different cases* in the psycho-educational clinic conducted by the Board of Education of the City of St. Louis. This clinic was established primarily for the examination of candidates for the special classes for mental defectives. Owing to the inadequacy of the clinic staff it has been necessary to limit the examinations largely to such cases, although principals have been permitted to refer disciplinary pupils for examination, even though they did not consider them to be feebleminded. But at times we have had so many cases that we have not been able to examine disciplinary children unless they seemed proper candidates for a special school for the mentally deficient. We have, however, made an exception of the truant boys assigned to the "Boys' Class," and almost all of them have been examined.

It is evident from these facts that the proportion of feebleminded children that we find among our disciplinary cases does not represent the proportion of feeblemindedness that would be found among all the disciplinary pupils in the entire school system. Under our procedure the brightest among the misbehaving pupils would not come before the clinic at all, or only rarely. Our percentages, therefore, could apply only to groups of troublesome children who are also mentally inferior. The peculiar value, then, of our data, does not consist in the light which they throw upon the question of the prevalence of feeblemindedness among delinquent and offending youths in general, but in the opportunity which they afford of determining whether the percentage of feeblemindedness is greater among the backward pupils who have a record of delinquency than among the backward pupils having no such record. In other words, we are able to compare two groups of pupils that are quite similar in that the children are examined primarily because of inability to do their school work or because of suspected mental deficiency, but which differ in that one group has shown delinquent tendencies while the other has not.

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*This does not include children examined in connection with baby clinics, or "better babies" contests, or children privately examined. Pupils re-examined in the school clinic have been counted only once.

Of the 1,363 cases examined, 248 had a delinquent record. The delinquencies included the following: disorderly, unruly or troublesome conduct in school, truancy, lying, stealing, viciousness and immoral practices or tendencies. Most of the pupils were boys. Many of the boys had been sent to the Boy's Class for truants, many were wards of the juvenile court, while some of them had been committed to the industrial school (residential). We shall refer to them indifferently as delinquents or disciplinary cases. The details regarding the 173 delinquents examined during the school years 1914–1915 and 1915–1916 will be found in *Problems of Subnormality** which gives the data for the boys and girls separately, the amount of intelligence retardation, and the intelligence quotients. The details for the 75 delinquents examined in 1916–1917 are given in the report of the Psycho-Educational Clinic and Special Schools, in the Report of the Board of Education of the City of St. Louis for 1916–1917.

All of the psychological examinations and intelligence diagnoses were made by the same person, using the same tests and standards of diagnosis, thus eliminating the variations due to the personal equation. The physical examinations were made by the regular inspectors of hygiene, who also recorded the personal and family history, while the school staff supplied the pedagogical data. Our space here permits us to call attention only to the facts contained in Tables I and II.

In Table I we have separated the 864 examinees into two groups, those in one group being reported by the school staff for delinquent conduct of some kind, while those in the other group were not so reported. It is possible that some of the pupils in the non-delinquent group were also inclined toward some kind of misconduct, although they were not so reported. Ordinarily, however, if a child is unruly or delinquent this fact is emphasized in the reports sent to the clinic. It is seen from the table that the proportion of normal children and those only a little below normal (called "retarded") is slightly higher among the delinquents than

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*Pp. 181–185, and 242–248.

Table I

Diagnosis of 173 Delinquent and 691 Non-Delinquent St. Louis Pupils Examined from 1914 to 1916

	Non-delinquent per cent	Delinquent per cent	Difference per cent
Normal	5.0	6.9	+ 1.9
Retarded	7.3	9.2	+ 1.9
Backward	34.1	49.7	+15.6
Borderline	12.3	11.5	− 0.8
Deferred	7.8	1.7	− 6.1
Mentality undetermined	0.7	0.0	− 0.7
Morons	17.0	15.0	− 2.0
Imbeciles	14.7	5.7	− 9.0
Idiots	0.7	0.0	− 0.7
Total feebleminded	32.4	20.7	−11.7

The + sign indicates a larger proportion among the delinquents than among the non-delinquents, while the − sign signifies the opposite.

among the non-delinquents. On the other hand, the proportion of morons is somewhat smaller and the proportion of imbeciles distinctly smaller among the delinquents than among the non-delinquents. The percentage of feebleminded among the delinquents is almost 12 per cent less than among the non-delinquents. The largest difference of all is in the backward category. The percentage of backward children is distinctly higher among the delinquents than among the non-delinquents, the difference amounting to 15.6 per cent.

The same general facts appear in Table II, in which, however, the figures in the first column are based on the total number of cases examined in 1916–1917, including the 75 delinquent cases

Table II

Diagnosis of 499 St. Louis Pupils Examined in 1916–1917

	Total number per cent	Delinquent per cent	Difference per cent
Normal	3.0	9.4	+ 6.4
Retarded	4.6	6.6	+ 2.0
Backward	32.8	48.0	+15.2
Borderline	31.2	22.6	− 8.6
Deferred	5.2	5.3	+ .1
Mentality undetermined	0.2	0.0	− 0.2
Morons	12.0	4.0	− 8.0
Imbeciles	10.4	4.0	− 6.4
Idiots	0.4	0.0	— 0.4
Total feebleminded	22.8	8.0	−14.8

already mentioned, but excluding children who had been examined during the two preceding years and a number of non-school cases. Had the delinquents been eliminated from this column, the differences which appear would have been slightly larger.

There are appreciably more normal children and children only slightly below normal among the delinquents, while the proportion of borderline, morons and imbeciles is distinctly smaller among the delinquents. The proportion of feebleminded children is almost 15 per cent less, while the proportion of backward children is a little over 15 per cent higher among the delinquents than among the total number of pupils examined.

On the basis of the analysis of our St. Louis data for the years 1914–1915 and 1915–1916, and on the basis of earlier studies and observations which we have made respecting the relation of mental deficiency and delinquency, we have previously reached these conclusions:

"It is particularly the backward pupil (instead of the feebleminded one) who creates the problems of discipline in the schools," just as it is "the borderline (and backward) cases which cause the most trouble in the institutions, 90 per cent of the disciplinary troubles being attributed to them. . . . The slow, backward child is, I believe, a more aggressive and intelligent trouble maker, and constitutes potentially a greater criminal menace. . . . We do not wish to imply that the feebleminded pupils are entirely tractable and cause no disciplinary troubles. Many of them are exceedingly restless, mischievous, and prone to outbreaks of temper, while some are consummate plotters of evil. And yet, it is probably true that most of the feebleminded develop delinquent tendencies in after years, not so much because of outspoken vicious proclivities as because of intellectual and moral weaknesses, weak powers of inhibition, and inability to resist temptation. They often become unsuspecting, helpless, or guileless dupes of the more intelligent vultures who prey upon the weak. The feebleminded as a class become a social menace because of their weaknesses and because of environmental opportunities. . . . We believe that a large number of criminals and prostitutes now diagnosed as feebleminded really belong in our class of dull, backward individuals."*

The conclusion that we have reached on further study of the problem during the past year is in harmony with the above state-

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**Problems of Subnormality*, pp. 248–250.

ments. We realize, of course, that some feebleminded persons who are non-delinquent in youth will become delinquent in later life. But this is also true of the borderline and the backward cases; but whether they will be in greater or less measure is a problem for future determination from follow-up work under various conditions with feebleminded, borderline, and backward children.

ILLEGITIMACY AND FEEBLEMINDEDNESS*

J. PRENTICE MURPHY

General Secretary, Boston Children's Aid Society

MATERNITY represents the most continuously exacting individual responsibility known to society. As community standards have been raised, they have always been preceded by the raising of the standards of maternity care, for every other standard in the community is affected by the care and training which the mother gives to her child.

The married woman living under normal conditions—and these involve the protection of a husband, a good home, proper physical care, sufficient food, adequate social life, education, normal opportunities for self-expression and for recreation—still has a most exacting responsibility in the rearing and training of her children. No protection she can possibly receive detracts one iota from the respect and admiration due to her for the great personal service she renders to her family and the state when she gives intelligent care to her children. And this picture of the true mother is a constant ideal through all civilized society.

The protection and approval which we as individuals in society give to the married mother as she performs her sacred duty are in marked contrast to the pains, privations and degradations visited upon the woman who gives birth to a baby out of wedlock, the woman whose baby's father is often unknown, whose child starts life without, as we term it, the essential and basic protection of home and family, of respect in the community, of a reasonable chance for a normal development.

No more striking picture of the unmarried mother occurs to me than the description by Dr. Leffingwell: "Against the background of history, too prominent to escape the observance from which it shrinks, stands a figure, mute, mournful, and indescribably sad. It is a girl holding in her arms the blessing and burden of motherhood, but in whose face one finds no trace of maternal joy or pride. There is scarcely a great writer of fiction who has not somewhere introduced this figure into the shifting panorama of romance, appealing for pity to a world which never fails in compassion with imaginary woes; now it is Effie Deans in the

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*Read before the Conference on Feeblemindedness of the Massachusetts Society for Mental Hygiene, Ford Hall, Boston, Dec. 14, 1916.

Heart of Midlothian; now Fantine resting by the roadside with Cosette in her arms; or Hester Prynne pressing little Pearl against the scarlet letter as she listens from the pillory to the sermon of Dr. Dimmesdale. Who is this woman, so pitiable yet so scorned? It is the mother of the illegitimate child. By forbidden paths she has attained the grace of maternity, but its glory is for her transfigured into a badge of unutterable shame."

Yet the tragedy of this frequently unprotected, unmarried mother and her baby is as nothing to the sordid and utterly discouraging spectacle of the mother who, in addition to being unmarried, is also sick in mind, impaired mentally, a defective.

Each year an increasing number of unmarried mothers come to the organization with which I am associated. During the past year almost 300 came to us, or more than one-third of all the unmarried mothers reported in one year for the city of Boston. It is our problem to assist with all the means the community offers in helping these mothers as befits their individual needs. This is no easy task. Society in its efforts to protect the family and the individuals within the family inflicts a terrible penalty on those who bring children into the world out of wedlock, a penalty which even in this day of multiform kindness and sympathy is heavy, and one from which the individual tries in every way to escape.

I do not wish to dwell at length on the costs to the mentally normal unmarried mother, but I do wish to show how difficult it is to help her in the face of this widespread prejudice. She usually must leave her family because they share her desire for secrecy, and in going elsewhere she is most often forced to accept fewer protections and in consequence her standard of living is lowered. To all the physical and mental strain of a normal pregnancy which the married woman has to endure, there is added the terrible anxiety due to loneliness, homesickness, loss of social position, the strain of living under new and strange conditions, and beginning all over again in an untried field, giving up the old things to which one has become accustomed and which are part of one's life and in which one is proficient, to take up new things, often menial and which carry with them a certain social disapproval. To the physical strain is often added under-feeding, improper housing, the interruption of a normal recreational social life and disarrangement of the essential little things that fill and round out every well-ordered life. There is the lack of protection of husband and home and family and friends and old associations, and all this bears heavily on personal and vital resources. If she is gifted with great personal courage, if she is spiritually minded, she may plan to meet all these burdens bravely and fearlessly; or, before she has time to reason a way out of her terrible plight, she may have tapped the sources of some organization which persuades or forces a plan which otherwise she would never have had the courage or the fortitude or the forethought to work out for herself.

Last year the Federal Children's Bureau in making a study of illegitimacy in Boston found that according to the records kept by the Bureau of Vital Statistics, there were approximately 800 illegitimate births for the year, and of this total number approximately one half were unknown to all the public and private charity organizations in the city. These unknown mothers, representing undoubtedly every condition, made their own plans which involved in most instances the placing of the babies apart from the mothers, frequently for adoption, and often under conditions which would not bear the searching light of careful inquiry. Many of these mothers returned to their own people with the fact of their maternity supposedly known only to a few—I say supposedly, for we delude ourselves into thinking that anything so important, so fundamentally pervading as the creation of life, can be suppressed and effectually concealed. A certain number of mothers of low mentality were still successful in making their own plans and have gone back unprotected to the communities from which they came, their mother responsibilities being over for the present.

The normal, unmarried mothers who come to us, or to any other organization, face a task of adjustment involving truly enormous responsibilities, and we never cease to marvel at what they have to endure and what they do—that is, the mothers who express personal responsibility for the babies to whom they have given birth. Nothing that we may do ever makes their task easy; much that we do often makes their task bearable.

Each normal, unmarried mother calls for flexibility of treatment. It may be possible to arrange for her return to her family or relatives. More frequently it means arranging for care with strangers. If she is unskilled, she may go into a family with her baby, or she may work in one family and have her baby cared for in another. If she is skilled, she may go back to the office or factory, boarding her baby. Most generally, we are finding the best results where the mothers work apart from their babies. They cannot otherwise meet the competition of other working women who are unburdened with babies and children, certainly unburdened with the responsibilities of their immediate care. Moreover, even in the field of family service, the number of homes open to mothers with their babies are few, and unless great care is exercised, the mothers who are selling their labor and must for a certain wage deliver a certain service, will be forced to give less than the necessary amount of time and attention to the well-being of their children.

Now, all we plan for the normal unmarried mother is of little value for the feebleminded mothers. The feebleminded mother presents a picture with varying lights; briefly, as follows:

Rarely is there anything sacred or elevating in the relationship with her baby's father. The feebleminded mother is usually unable to say just who is the father of her baby. Her association with men has been entirely promiscuous, not a matter of long planning or accompanied by romance, but just a straight, sordid expression of the animal. Legal action for support where the mother is feebleminded is generally impossible to carry through in the courts and wisely so, because the feebleminded girl cannot say with any certainty just whom she has lived with. A child born to a feebleminded mother under the best conditions is under a cloud, and when the mother, as is usually the case, must seek shelter in a place other than her home, the ensuing neglect which she suffers and passes on to her child accentuates whatever mental deficiencies the child may have. The height of human woe cannot well exceed the state of a child, who, born as illegitimate, is also born to a feebleminded mother who cannot even protect herself.

The feebleminded mother does not learn by experience. In a group of 184 normal, unmarried mothers, there were 186 children. The normal girl does not easily forget the horrifying ordeal through which she has passed. In a group of 38 feebleminded mothers, there were 46 children. We have knowledge of feebleminded mothers who have had two, three, four, five, and six children each. The following are some typical instances of feebleminded women who have had children:

A. F., German, 38 years old, has borne one child, feebleminded.

M. D., American, 33 years old, one child.

M. P., American, 18 years old, tried to commit suicide; has given birth to one child and is again pregnant.

R. K., German-American, 26 years old, two children.

M. F., American, 27 years old, has had one miscarriage and has given birth to a baby.

M. S., American, 19 years old, one child.

N. S., Jewish-American, 27 years old, one child.

E. F., American, 21 years old, one child.

L. S., colored, 35 years old, unmarried, has given birth to eight children, some still-born, some with operations, all by different fathers.

M. B., 24 years old, herself illegitimate, two children by different fathers.

T. S., 32 years old, American, sexual pervert, has borne four children by four fathers.

B. G., 21 years old, American, has given birth to one child which she repeatedly drugged to lessen amount of care required.

The feebleminded mother is not necessarily more sex-assertive than the normal mother, but she is certainly less qualified to protect herself. Many of the defective mothers who come to us are not over-sexed, but they have no comprehension of the significance of the maternal feeling. They often have, however, a skilful veneer that passes for deep maternal feeling which deceives repeatedly all but the keenest observers. It is this type of girl, diagnosed as feebleminded by the psychiatrist, who is nevertheless successful in her appeal when her case goes to court. Her care-free, girlish, surface attractions cover the shallow emptiness of her defective mind. The courts are still most conservative about taking cognizance of the irresponsible social acts of the feebleminded mother who in her appearance seemingly belies such acts. This is a great obstacle in treatment which the courts and social agencies must work out.

With many feebleminded mothers the maternal feeling is exceedingly strong and there goes a love for babies and children, and this is a snare which often entraps a man deserving a higher type of companion. I refer now specifically to a group of feebleminded girls who have had illegitimate children, often feebleminded, and who have subsequently married and now continue under the sanction of the law to rear other unfit children.

The feebleminded mother suffers frequently from syphilis or gonorrhea and because of her mental condition is unable to protect her child from infection. We are in touch at this moment with one defective mother suffering from gonorrhea whose child likewise has gonorrhea, the child's infection coming from the mother.

The feebleminded mother is unable to profit from the assistance and care which are of help to the normal, unmarried mother. Every public and private organization caring for defective mothers in the community is continuing with an expense out of all proportion to the results obtained.

The feebleminded mother with her baby or babies is in home after home an impoverishing drain and expense. Feeblemindedness often arises in families of normal parents, being due to causes which they cannot control. When to the burden in a poor home of a non-productive worker is added the expense of frequent successions of illegitimate children to which the defective mother gives birth, one pictures a situation that cannot be described or understood except by those who have lived through it. Many a decent poor family has been wrecked or dragged below the poverty line by reason of such an experience.

The feebleminded mother, in addition to her mental impairment, is frequently physically impaired. Her mental condition often indicates profound bodily maladjustment and so she is not equal to the continuous physical strain which life involves for most of us.

A survey of the situation in Massachusetts calls for an extension of care on the part of the state for every feebleminded girl or woman capable of bearing children and who cannot be protected out in the community. Many girls and women who are defective mentally may safely stay in the community if under careful oversight. Many of us know of instances where this plan of family care is being safely followed.

It should be a uniform practice to separate defective mothers from their babies just as soon after birth as the attending physicians deem wise. We have too many feebleminded mothers in this state known to public and private charitable organizations who are responsible for the care and training of their children. The presence of the baby with the defective mother does not serve as a check to further illegitimate babies and does mean improper care for the baby. Such illegitimate babies born to defective mothers should become automatically wards of the state. I don't mean by this that the state should necessarily remove the baby from the mother's people, but it certainly should be able to prevent the mother disposing of her baby at will. If intelligent people knew of the numbers of babies born to defective mothers, who are given away for adoption to people who know nothing about their history and background, this suggestion would receive a wider support.

The forces which tend to impair men and women and to make them degenerate are so numerous and so active that there can be no question of the desirability of laying a heavy hand on the tragic process of breeding children, frequently defective, by defective mothers.

FEEBLEMINDEDNESS AND PROBATION*

HERBERT C. PARSONS
Deputy Commissioner of Probation, Boston

SO naturally and spontaneously has probation developed in Massachusetts that its people, at least those not directly concerned with the correctional problems, are found to be almost unaware of its existence and quite unknowing of its extent, not to say of its intention. It is a fact, however, that probation has come into the major responsibility in our dealing through the courts with offenders against the law.

A definition of probation is not easy. Perhaps the best one is reached when we say that "probation is a process by which the courts, pending disposition of the case, or under suspension of sentence, place a person convicted of crime in the care of a probation officer, with a view to reformation." Too great emphasis cannot be put upon the final word "reformation." It is important in this discussion because we are confronted with the question whether persons who are mentally defective are properly included in the scope of its purpose.

The feebleminded person brought to the bar of justice presents one of the most difficult problems of the courts. As yet, no clear path is provided for his disposition. The courts have no power to commit him directly to a school for the feebleminded. He may be sent there only by resort to the probate court, under precisely the same law as applies to the insane. He may not be sent to the insane hospital and, if sent, would be most unwelcome there. He may be sent to a jail or prison and in fact is so sent, to such number that at least one fourth of the population of correctional institutions is made up of such as he. The prisons do not want him and have nothing to offer him. An easy disposition is to place him on probation and I regret to say that in numbers almost appalling probation is resorted to and is forced to assume a responsibility which it is not equipped to discharge and which is, indeed, distinctly foreign to its intent.

Over the gateway of probation through which the courts are sending a constantly increasing procession of offenders, there might well be placed the sign "No feebleminded wanted here." Beyond that gateway stand the probation officers, appointed by the courts, extending a helping hand to those whom the courts have considered capable of being helped by diligent kindness. Obviously, to commit to the care of probation officers those who at the outset are seen not to have capacity for response to the efforts made in their behalf is unjust both to the object of this intended favor and to the officers who undertake the work. It is a prime essential of the probation effort that there shall be a fitness for reformation and reconstruction in the person in whose behalf it is exercised. Its sole purpose is to bring persons who have come within the reach of the courts into a habit of obedience to law and such a readjustment as to secure, so far as is possible, their right conduct, not only during but beyond the period of supervision. We who are concerned in the right use of the probation service are growing insistent that it shall not be employed simply as a means of disposal of difficult cases. For example, the courts are being urged to find other disposition for a large proportion of the persons convicted of drunkenness, among whom there are many whose condition clearly forbids the hope that they can be helpfully dealt with by this process. It has not been infrequent for the courts to place on probation men in whose cases the brightest prospect is that they will take themselves promptly beyond the borders of the state. It takes no argument to show that these classes are improperly handled when they are assigned to officers who exist for the purpose of helping men and women to right conduct. If to their numbers are added, as is actually done, persons without mental accountability, the service becomes loaded with a burden which hampers the discharge of its really vital duties to the courts and to society. Probation is an instrument to be used with an appreciation of its fine social and individual possibilities and its edge should not be deliberately blunted by requiring its exercise upon unyielding material.

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*Read at the Conference on Feeblemindedness of the Massachusetts Society for Mental Hygiene, Ford Hall, Boston, December 14, 1916.

So much for the protection of the probation service in its actual responsibility. Let us consider the case of the person himself and how far probationary treatment has a possibility of benefit. Probation holds out no promise beyond the supervision necessary to bring about right conduct in more or less responsive persons. It is equipped none too well for the task of dealing with the normal minded. It is totally unequipped for the special dealing with, or treatment of, the subnormal. There is no need to say that the person with subnormal mentality needs special treatment, a treatment largely custodial.

There is great attraction in the possibility of out-patient care of the feebleminded. Doctor Wallace, superintendent of the Wrentham State School, in his report* for the year 1914, outlined a system for the supervision by the state of mental defectives in their own homes. Recently Doctor Fernald† presented the possibilities of this extension in most attractive form. But it must be by organization quite distinct from the probation service of the courts for at least two reasons: first, that the probation service is amply occupied with its reformatory task; and, second, that it reaches only those cases which come by the avenue of the court, by no means including all those who require the supervision which the superintendents of our institutions advocate.

Injustice, however, would be done to the probation officers if they were put in the light of resisting any task put upon them by the courts. As the state is now organized, the misplacing of the feebleminded is unavoidable. The probation service must take and is disposed to take its share of a burden which rests unfairly and unjustifiably upon all branches of the correctional work. Ultimately there will be a determination in every doubtful case of the mental condition of the person whose disposition is the court's problem. Actually but one court in the state is today officially equipped with the means of determining the mental status of the offender. The Boston Municipal Court acquired this equipment under the cover of its probation officer but the legislature of this year has provided for its separation as a distinct service.‡ There is assurance that the Boston Juvenile Court is presently to have its mental clinic by the establishment of a fund through private subscription,§ as a memorial to the judge who made this court the model for the world. These courts, with their jurisdiction limited to but a section of the city of Boston, are no more than furnishing an example to the rest of the state. Until the day comes when every court is similarly equipped and when every person brought before it shall have the benefit of mental examination to determine in what place and by what means hē may best be helped, the existing agencies must need share the unscientific and irrational assignment to them of persons for whom they can do but a fraction of the good their cases demand.

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*Wrentham State School. Eighth Annual Report, Boston, Wright & Potter, 1915, p. 14-15.

†What is Now Practicable in the Way of Probation, Education, Supervision and Segregation of the Feebleminded. Walter E. Fernald, M.D. To appear shortly in the *Journal of Education*.

‡Dr. V. V. Anderson, psychiatrist.

§The Judge Harvey H. Baker Fund.

Moreover, the discovery of mental defect in the offender may never fully determine that there is no hope of his restoration to a right social status. The degree of responsibility in the offender varies with every individual case. Hence, while mental defect is evident, it may not be the major feature in the case and such helping effort as the probation officer may give may, after all, be well expended and bring about precisely that correction which the service exists to accomplish.

At all events, as matters now stand, probation officers may readily be pledged to do their part in dealing with this doubtful element in our problem, and they are doing so. To an extent, the probation service may serve as an observation field—a trying-out ground—and this it is actually doing. The alternative of commitment to jail is infinitely worse from the standpoint of the person, and vastly more costly from the standpoint of the public. No rigid rule for a moment would be urged under existing circumstances for the probation officers to resist the assignment to them of doubtful or even of fairly well-determined cases of feeblemindedness.

Whatever service may be done by probation officers for the feebleminded must, however, be treated as a concession—a very gracious and a very humane concession to the present imperfect organization of the state. This instrumentality of upbuilding can only temporarily be regarded as the one for the care of any portion of the mentally disordered or the mentally defective. Its growth into a larger measure of usefulness depends upon a closer selection of the material committed to it. In its behalf there may be waived a strict requirement of fitness in its charges, but we must continue to insist that it is not the instrumentality for dealing with persons whose mental outfit is such as to make their presence in the community a hazard to the neighborhood and much less than an assured benefit to themselves.

SEGREGATION OF THE UNFIT IN REFORMATORIES*

GUY G. FERNALD, A.M., M.D.
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THE purposes of classifying the population of an institution, that of a prison for instance, may be regarded as proximate and ultimate. When the proximate purposes of classification are realized, the numbers and personnel of essential groups presenting significant characteristics are determined and when the ultimate purposes are realized the actual physical differentiation of certain groups may take place and the adaptation of suitable treatment and training may be most economically begun.

The actual physical segregation of all groups one from another is not necessary nor desirable; but that certain prisoners should not be associated with those who would be contaminated or retarded by such association is evident. At the Massachusetts Reformatory, where the population constitutes a fairly homogeneous group, the average age being twenty years and the average sociologic deviation very small, not even a preliminary survey was needed to reveal the existence of a class or group whose unrestricted association in the schoolroom and workshop or on the farm was a distinct retardation and detriment to both themselves and the other inmates. This group, the existence of which was easily recognized, has been found in our classification studies to be of an intrinsically weak or defective mentality. The group includes about 15 per cent of the Reformatory population and its members are popularly known as "defective delinquents" or "feebleminded." For our purpose the term "segregable" is more definitive, however, and is therefore used. It is clear that members of this class should not be imprisoned or trained in contact with those of ordinary mental capacity and unlimited responsibility. Their proper care calls for slow training in an environment adapted to their limited capacity and peculiar needs where they should be sheltered until their return to society can be effected under conditions assuring protection to the community.

The proximate purpose of the laboratory studies of inmates at the Massachusetts Reformatory is the demonstration of this group of unfit, mostly feebleminded, in size and personnel, so that it may be known who and what they are. The accompanying syllabus shows the result of our individual examinations and classification of 1,107 inmates in the last two years. Since the departure of the unfit from normality and their inability to compete in the community unaided is measured by a variety of mental departure as well as by degrees of mental efficiency, we have endeavored to show these differences in our diagnoses, a survey of which follows:

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* Read at the Conference on Feeblemindedness of the Massachusetts Society for Mental Hygiene, Ford Hall, Boston, December 14, 1916.

Cross-reference Syllabus of Psychopathic Diagnoses

Massachusetts Reformatory, Concord, 1914–1916

GRADES OF EFFICIENCY

Intramural descriptive designations		Adult	Sub-normal	Segre-gable	Total	
Competent	Accidental offender	50	1			
	Responsible offender	347				398
Deviate	Recidivist		118	27	145	
	Psychopath		159	22	181	
	Epileptic		16	9	25	
	Congenital syphilitic		16	11	27	
	Sex pervert		6	10	16	
	Insane			10	10	404
Deficient	Moron		155	77	232	
	Imbecile			3	3	235
	Unclassified	52	17	1		70
	Total	449	488	170		1107
	Percentage Rate	40.6	44.1	15.3		
Included Above	Alcohol addict	152	239	56	447	
	Drug addict	9	13	4	26	

The attempt has been made to draw the line of demarcation between subnormal and segregable, to separate those capable of supporting themselves honestly and unaided from those unable to live honestly without surveillance.

Referring to our tabulation, it will be noted that neither the term "feebleminded" nor "defective delinquent" is exactly synonymous or co-extensive with "segregable." The purely feebleminded are the morons and imbeciles—very few of the latter in the Reformatory population. Many morons are tractable and the question of their segregation for training is not one wholly of their deficiency; hence the segregable are designated. All the deviates are defective delinquents, but not all should be segregated. The word segregable has an administrative as well as a sociologic significance and distinguishes a Reformatory group of a certain limited degree of mental efficiency divided into several varieties of mental departure.

A few cogent facts that stand out clearly regarding this class of segregables in the Reformatory may be stated:

1. Members of this group are of demonstrably defective, deviate or alienate mentality and hence of limited responsibility (demiresponsible of Grassett), and as such should not be sentenced to serve with the fully responsible.

2. This group of defective and potential offenders has long existed in communities, courts and prisons but its existence and characteristics have been recognized only when numbers were assembled, as many have been, in the reformatories.

3. Members of this group present a variety of kinds and degrees of mental anomaly, disposition and character defect, as must be the case when the unity of normality is wanting; hence classification and individualization must be extended in treating this group beyond the limit of that required in the case of the fully responsible.

4. Existing institutions for the care of feebleminded are not adapted to receive defectives with vicious tendencies and training and the admission of the vicious element to association with the protected would result in harm to the latter; hence the logical custodians of the vicious defectives are the penal institutions.

5. Some form of special custodial care, in which the hospital features are prominent, providing for the absolute physical segregation and slow training to industrial usefulness and ultimate restoration to liberty, perhaps, is urgently needed for this group.

6. No provision for supplying the peculiar needs of this particular class exists in this state or in any other state, though Massachusetts has a law tacitly recognizing the existence of the defective delinquent, but carrying no adequate appropriation or plan. Commissions in several states are studying the problem and New York or Illinois will probably soon have something definite to offer. The New York City police department has just reopened its psychopathic laboratory for the diagnosis and classi-

fication of arrested offenders so that those of limited responsibility may be known before sentence.

7. Since there is no effective provision for this class of mental weaklings whom the probation officers cannot trust, the courts can do nothing else to protect the community and the defectives themselves than to send them to the reformatories.

Plans for the adequate care of those of segregation grade of mentality need not necessarily comtemplate an institution with new or separate administration, since absolute physical separation of inmates of inferior degrees of mental efficiency marks the essential point of divergence from the present system and, moreover, sufficiently emphasizes its principal defect. Furthermore, the segregation of the unfit would open the way for the stressing of the education of prisoners as the accepted means to the end of their reformation. Shall we not recognize the fact that the time is past when prisoners are simply occupied during sentence and shall we not proceed to take the next logical step in penalogy, *i. e.*, education during incarceration?

The juxtaposition of three trite sentences may serve to emphasize the importance of this point:

$$\text{PRISONERS}\begin{cases}\text{unoccupied (as formerly) regress.}\\ \text{occupied (only) stagnate.}\\ \text{educated (as they may be) progress.}\end{cases}$$

We have stated the ultimate purpose of classification to be the actual physical segregation of such classes as need that treatment. Not all the classes recognized as essential need segregation however. In the Reformatory to-day exist three grades or classes distinguished by differences of privilege and insignia, divided according to conduct. With the elimination of the 15 per cent of segregables, extension of classification among these three grades could proceed unhampered and the present differentiation, largely one on paper only, could become actual. If the physical constitution of the buildings at Concord permitted, an ordinarily well-equipped prisoner could be assigned on arrival to the second grade to be actually physically promoted or demoted, as his conduct should indicate, to the first grade with its added privileges and responsibilities, or to the third grade with its lesser comforts. And with promotion or demotion would come his transfer from one intramural community to another. Under these conditions a man disposed to seek self-culture and to achieve progress could measure his advancement and realize the rewards of well-doing as he can not now do. So the segregation of the unfit is an imperative necessity and the augmented progress of the majority enabled thereby is a most important desideratum.

The value of the eugenic proposal that the feebleminded be prevented from propagation lies in its promise of ultimate relief from the "burden of feeblemindedness." The segregation of the unfit in reformatories under indefinite commitment, as are the insane, other feebleminded and epileptics, would enable the realization of the promise, so far as the most hopelessly unfit drifting in and out of the courts is concerned, since their segregation for training to self-support would prevent their propagation and eliminate one very perplexing factor in our sociologic and economic problem.

Finally, the indicated and adequate care of the members of this class of feebleminded prisoners with a vicious training and tendencies would not only greatly facilitate the solution of urgent penalogical problems, but would be a large contributing factor in the solution of the major sociologic problem, the conservation of mental hygiene in this generation and in those of the future.

SUMMARY

1. There is in most reformatories a small, fairly well-defined class of unfit inmates whose association on equal terms with the fully responsible is a detriment to both.
2. The unfit should be absolutely physically segregated in a specially constituted farm colony of which the hospital and laboratory features are prominent.
3. The larger group of fully responsible inmates should be actually physically divided into groups according to their conduct, provision being made for promotion and demotion from one intramural community to another.

ABSTRACTS

SURVEY OF MENTAL DISORDERS IN NASSAU COUNTY, New York. July–October, 1916. By Aaron J. Rosanoff, M.D.

FORTIFYING THE CHILD AGAINST MENTAL DISEASE. By Jessie Taft.

DECLINE OF ALCOHOL AS A CAUSE OF INSANITY. By Horatio M. Pollock.

THE NECESSITY FOR MEDICAL EXAMINATION OF PRISONERS AT THE TIME OF TRIAL. By Paul E. Bowers.

THE PSYCHOPATHIC EMPLOYEE; A PROBLEM OF INDUSTRY. By Mary C. Jarrett.

ORGANIZATION OF PSYCHOPATHIC WORK IN THE CRIMINAL COURTS. By Herman M. Adler.

FIFTH ANNUAL REPORT OF THE BOSTON PSYCHOPATHIC HOSPITAL. Report of Director.

THE FEEBLEMINDED. By Walter E. Fernald.

SURVEY OF MENTAL DISORDERS IN NASSAU COUNTY, NEW YORK. July–October, 1916. A Report. By AARON J. ROSANOFF, M.D. N. Y.: National Committee for Mental Hygiene, 1917. Publication No. 9.

This is probably the most careful and thorough survey of mental abnormality in a district of considerable size that has yet been made. Nassau County has an area of 274 square miles and a population of 115,827. Every means short of a personal interview with each inhabitant was exhausted in the effort to make the survey complete; and in four small districts, in order to have data for comparison, every house was canvassed. The surveys of the British Royal Commission on the Care and Control of the Feebleminded covered sixteen widely separated districts in England, Scotland, Wales and Ireland with a total area of 6,688 square miles and a population of 3,913,806. The staff was relatively much smaller and consequently the work had to be somewhat less thorough.

The Nassau County survey was conducted under the auspices of the National Committee for Mental Hygiene. The Advisory Committee consisted of Dr. Charles B. Davenport, Prof. Stephen P. Duggan, Miss Elizabeth E. Farrell, Mr. Homer Folks, Dr. August Hoch, Dr. Aaron J. Rosanoff, Mrs. Charles C. Rumsey, and Dr. Thomas W. Salmon. The staff was made up of six physicians, of whom Dr. A. J. Rosanoff was Director, and fifteen field workers.

Nassau County was selected for a number of reasons, the chief of which was that it is a district probably as nearly representative of the population of New York state as can be found. It has many old families, and also a plentiful number of immigrants from many lands.

There are both rural and urban environments. Another reason was that the social agencies of the county are well organized and could be of great aid in numerous ways. Finally, the population is not too large to be covered in a limited time, and transportation facilities are excellent.

The director states that the problem the committee set out to solve is not the percentage of insane, feebleminded, or otherwise mentally defective persons, because it is now recognized that it is not possible absolutely to separate mental abnormality from normality, but "What instances of social maladjustment, sufficiently marked to have become the concern of public authorities, are, upon investigation, to be attributed mainly or in a large measure, to mental disorders?" Accordingly an effort was made to secure records of all cases of maladjustment brought to the attention of the authorities in the course of one year that might be due to mental trouble. Various local charitable and philanthropic agencies were consulted; the lists of the overseers of the poor, the dockets of the justices, and the records of the district attorney, of the Nassau County Association and of a number of New York state institutions were investigated; and all practicing physicians, neighborhood workers, truant officers, ministers, and old residents were interviewed. Furthermore, it was planned to visit the near relatives of persons found to be abnormal, with the expectation that certain cases not otherwise recorded would be thus discovered. It not infrequently happened that cases not disclosed by any of these means came to the notice of the field workers in the course of their daily visits.

It was felt, however, that even after all these sources of information had been exhausted some cases of abnormality would still be missed. In order to be able to estimate approximately the error due to these omitted cases, four districts, varying in population from 966 to 1,427, were subjected to intensive study, that is, to a house to house canvass. These districts were selected with a view to including all important elements of the population of the county.

Great care was taken to have the work of the field workers conform to one standard. It was a great advantage that all the workers were college graduates and that a number had had previous experience in this sort of work. In the beginning, printed instructions as to the manner of gathering information were given to the field workers, and later a simplification of the Binet system of intelligence tests was devised in order to give uniformity to the estimates of intelligence. Weekly conferences were held at which the chief problems encountered by the workers were discussed, and an attempt was made so to instruct them that their methods would be approximately uniform. When it was thought desirable, a full psychometric examination was given, and in all medical cases a consultation with one of the members of the medical staff was arranged. As a routine, the workers obtained information on the following subjects: name, sex, age, marital condition, education, birthplace, race, how long in United States, residence, father's name and birthplace, mother's maiden name and birthplace, occupation and weekly earnings. In the abnormal cases information was also gathered concerning the family and personal history, development of psychosis, and the physical and mental status that is usually obtained in state hospitals.

Inasmuch as the primary interest was in those cases whose mental condition was such as to lead to maladjustment, two classifications were employed—a medical and a sociological one. These classifications are found in the tables which follow. It may be stated here, by way of explanation, that the medical heading "Disorders of uncertain nature or etiology" was formed to cover cases in which the data were incomplete and cases not fitting into the preceding groups (certain cases of inebriety, sex immorality, criminal tendency and dependency). Under the sociological classification "Medical cases" are instances of neuropathic conditions such as fainting spells, migraine, and "nervous prostration." Under "Other groups" are many conditions of which "incompetent housewife," "failure to support family," "sanitary menace," and "improper guardian" are descriptive terms used. In a hospital for the insane such diagnoses as "psychopathic personality," "constitutional inferiority" or "moral imbecility" would probably have been made.

As a result of the survey, 1,592 cases of mental abnormality and 583 cases of doubtful mental normality were discovered. The abnormal cases were distributed as follows in the medical classification.

Medical Classification of Abnormal Subjects

Medical classification	Intensive districts		In county at large		Total		
	No.	Per cent	No.	Per cent	No.	Per cent	Per 100,000 population
Constitutional disorders:							
Recoverable psychoses	3	1.8	48	3.3	51	3.2	44.0
Recurrent psychoses	3	1.8	45	3.1	48	3.0	41.4
Chronic psychoses without deterioration	9	5.3	41	2.8	50	3.1	43.2
Chronic psychoses with deterioration	9	5.3	129	9.0	138	8.7	119.1
Epilepsy	8	4.7	64	4.5	72	4.5	62.2
Arrests of development	72	42.3	561	39.4	633	39.8	546.5
Huntington's chorea			1	0.1	1	0.1	0.9
Disorders of exogenous origin:							
Traumatic psychoses	1	0.6	4	0.3	5	0.3	4.3
Alcoholic psychoses			34	2.4	34	2.1	29.4
Syphilitic psychoses			15	1.1	15	0.9	12.9
Other groups:							
Senile psychoses	8	4.7	25	1.8	33	2.1	28.5
Cerebral arteriosclerosis	3	1.8	15	1.1	18	1.1	15.5
Brain tumor			1	0.1	1	0.1	0.9
Cretinism and myxoedema	1	0.6			1	0.1	0.9
Disorders of uncertain nature or etiology	53	31.1	439	31.0	492	30.9	424.8
Total	170	100.0	1,422	100.0	1,592	100.0	1,374.5

The following table gives the result of the sociological classification.

Sociological Classification of Abnormal Subjects

Sociological classification	Intensive districts		In county at large		Total	
	No.	Per cent	No.	Per cent	No.	Per cent
Retardation in school	19	11.2	150	10.5	169	10.6
Truancy, unruliness, etc.	3	1.8	17	1.2	20	1.3
Sex immorality	23	13.5	93	6.5	116	7.3
Criminal tendency	6	3.5	73	5.1	79	5.0
Vagrancy			2	0.1	2	0.1
Dependency	31	18.2	249	17.5	280	17.6
Inebriety	35	20.6	285	20.1	320	20.1
Drug habits	1	0.6	3	0.2	4	0.3
Domestic maladjustment	3	1.8	11	0.8	14	0.9
Medical cases	9	5.3	48	3.4	57	3.6
Other groups	15	8.8	353	24.9	368	23.0
No maladjustment	25	14.7	138	9.7	163	10.2
Total	170	100.0	1,422	100.0	1,592	100.0

It is interesting to note that for about one fourth of these cases (chiefly the recoverable, recurrent, chronic, traumatic and alcoholic psychoses), good institutional provision is made by the state, while for the remaining three fourths, very little is provided. In the latter group some of the greatest menaces to the community are found and it is certainly to the interest of society that they should be confined in institutions.

It may here be stated that of the 492 cases falling in the group "Disorders of uncertain nature or etiology," 236 came under the sociological heading "Inebriety," 46 under "Dependency," 43 under "Sex immorality" and 58 under "Criminal tendency." Detailed histories of cases of inebriety, dependency, sex immorality, and criminal tendency are given in order to show how hard it is to classify definitely many cases of mental abnormality.

Of the 368 cases under "Other groups" of the sociological classification, 310 were in institutions and therefore not assigned a more definite place in the sociological classification. Some of the remaining 58 were described as "requiring constant care," "nuisance in community," "suicidal tendency," "sanitary menace," etc.

When arranged as to age, it was found that relatively few of the abnormal cases fell in the age period below five years. This is due to the difficulty in recognizing abnormality at that age. A relatively large number fall in the age periods above forty years, thus showing how the factors which give rise to mental abnormalities or serve to render them manifest, increase with advancing age.

Another table gives statistics concerning marital condition. It shows (1) the greater tendency of the abnormal group to remain single, and (2) the greater tendency of the same group to be divorced or separated. "It does not appear from these findings that there is ground for apprehension of any increase of mental disorders."

Four Groups of Subjects Compared as to Marital Condition

Sex	Ages	Group 1					Group 2					Group 3					Group 4				
		S.	M.	W.	D.	Sep.	S.	M.	W.	D.	Sep.	S.	M.	W.	D.	Sep.	S.	M.	W.	D.	Sep.
Male	11-20	284	4				255	4				93	3	1			162	2			
	21-40	178	473	3		2	103	162	1		2	28	38	1		1	137	80	1	1	15
	41-60	23	367	13	1	2	29	181	7	1	3	12	39	3		2	66	128	21	3	26
	Over 60	5	91	24	1	1	4	51	30		1	1	9	6			24	31	29		9
Female	11-20	334	18				227	12			1	70	7			1	139	6			3
	21-40	152	530	14	5	12	70	204	14	5	9	11	43	8		6	111	132	16		31
	41-60	28	298	47	1	8	21	161	45	1	10	5	42	11		2	31	101	40	1	17
	Over 60	8	55	65		3	6	33	42		2		5	7		1	11	15	41		3

Group 1—Normal persons with normal relatives.
Group 2—Normal persons with abnormal relatives.
Group 3—Doubtful cases.
Group 4—The abnormal cases.
Cases under 11 years of age or in which age or marital condition is unascertained have not been included in this table.
S=single; M=married; W=widowed; D=divorced; Sep=separated.

The table giving the average weekly earnings is interesting.

Earnings	Group 1	Group 2	Group 3	Group 4
	Per cent	Per cent	Per cent	Per cent
Under $7.00	0.8	2.7	10.4	33.0
7.00–10.00	9.3	14.9	29.2	32.8
11.00–20.00	57.9	66.4	52.9	28.9
21.00–50.00	30.0	14.7	6.6	5.0
Over 50.00	2.0	1.3	0.9	0.3

When the data as to education are classified, the influence of two factors, namely educational opportunity and educability, is shown in a rather striking way. "Thus, the foreign-born white in Group 1 make a poor educational showing obviously attributable in the main to lack of educational opportunity and not to low degree of educability, in view of the fact that their descendants, the 'native of foreign or mixed parentage,' are able, in the presence of good educational opportunity, to make a showing approaching that of the native of native parentage. Group 4, on the other hand, makes a uniformly poor educational showing in all its subdivisions, even that of the 'native of native parentage,' *i. e.*, in the presence of good educational opportunity; here, therefore, the poor showing is largely attributable to low degree of educability."

It is interesting to consider the treatment that has been provided for these abnormal individuals and the treatment it is judged they need.

History of sojourn in institutions	Intensive districts		In county at large		Total	
	No.	Per cent	No.	Per cent	No.	Per cent
Now or formerly in institutions	33	19.4	629	44.2	662	41.6
Never in an institution	127	74.7	747	52.6	874	54.9
Unascertained	10	5.9	46	3.2	56	3.5

Treatment required	Intensive districts		In county at large		Total	
	No.	Per cent	No.	Per cent	No.	Per cent
Institutional care	74	43.5	872	61.4	946	59.4
Other treatment	68	40.0	386	27.1	454	28.5
None	28	16.5	164	11.5	192	12.1

These two tables are also of interest.

Amount of Institutional Care Actually Available for Cases Judged to Require it

	Intensive districts	In county at large	Totals
Now in institutions	8	357	365
Have been in institutions, now at large	21	216	237
Past sojourn in institution unascertained, now at large	7	28	35
Have never been in an institution	38	271	309
Totals	74	872	946

Rough Classification of Cases Judged to Require Institutional Care and Not Receiving it

	Intensive districts	In county at large	Totals
Insane	10	98	108
Feebleminded	21	168	189
Epileptic	1	6	7
Other psychopathic groups	34	243	277
Totals	66	515	581

In the following table is given the sociological classification of the cases judged to require institutional care.

	Intensive districts		In county at large	
	Primary item	Secondary item	Primary item	Secondary item
Retardation in school	5	1	50	7
Truancy, unruliness, etc.		2	8	11
Sex immorality	18	22	63	72
Vagrancy			2	12
Criminal tendency	3	10	22	65
Dependency	4	13	69	119
Inebriety	33	9	207	30
Drug habits	1	5	2	1
Domestic maladjustment		12	5	93
Medical cases		1	3	3
Other groups	2		76	13
No maladjustment	1		7	
Totals	67	75	514	426

The following table also gives some very interesting data.

Kinds of Institutional Care Actually Available or Given in the Past to 662 Cases

	Intensive districts	In county at large
State hospitals for the insane	7	203
Private sanatoria	3	44
State hospitals for the criminal insane	1	6
Lock-ups or jails	17	123
Penitentiaries	3	20
State prisons	2	33
Reformatories	4	24
Training schools for delinquent children	3	36
State institutions for feebleminded or epileptic		42
Almshouses		62
Private institutions, at expense of the county	3	109
Totals	43	702

The work in the schools was done independently of the rest of the survey by a special detail of physicians from the United States Public Health Service under the direction of Surgeon Taliaferro Clark. A total of 2,500 pupils were examined and of these, 52 were classed as abnormal, 14 as probably feebleminded, and 116 as retarded. Comparing these results with those obtained in the survey made outside of the schools in the districts from which these pupils came, one fact is out-standing, namely, that the majority of abnormal cases among children of school age are not to be found in the schools.

The last section of the report gives an evaluation of the findings and a discussion of their significance.

Comparing the main result of this survey (percentage of abnormality 1.72) with that of the British Commission (average percentage of abnormality 0.82), and carefully considering the methods employed in each survey, it seems clear that the contrast is due to the difference in methods. The British survey is evidently much less thorough.

The results in the four intensive districts indicate that some cases have been overlooked in the Nassau County survey. The question of the best method of making a survey—whether that employed in the intensive districts, or that in the county as a whole, or a combined method—must largely be determined by special objects in view and by local conditions.

"The survey has shown very clearly that for the bulk of cases presenting psychiatric problems, the benefit of psychiatric study, judgment, and treatment is not available." Of 946 cases judged to require institutional treatment, only 365 were really in institutions. The State of New York provides for 396.3 insane, epileptic and defective persons per 100,000, and according to the survey, 816.7 per 100,000 are in need of custody. Hence the capacity of the New York institutions could be doubled without any danger of having space unused. This would really be an economy for the people of the state, for in such institutions the annual cost is between $150 and $200 per capita, while under the present arrangement the maintenance of these cases at large and the losses arising from trials, theft, the spreading of venereal infection, and other antisocial actions undoubtedly greatly exceed these amounts.

The following types of institutions are needed: (1) schools and colonies for the feebleminded, (2) separate institutions for defective delinquents (3) industrial colonies for inebriates, vagrants, etc., and (4) provision for epileptics.

It is recommended that a system of registration of cases admitted to institutions, or coming to light in the courts or schools that may be due to mental abnormality, be instituted. It is also suggested that it would be well to try out in one state a model system of psychiatric treatment, which would be financed by bond issue and endowments from private sources, and which would serve as a working model for other states.

FORTIFYING THE CHILD AGAINST MENTAL DISEASE. By JESSIE TAFT. *American Education*, September 1917.

Miss Taft urges an extension of the activities of the school in the field of mental hygiene. She points out that it is now an accepted function of the school to look after the physical condition of the pupils and that more and more efforts are being made to sort out subnormal children in order to afford them the training best suited to their capabilities. There has been little effort, however, to study with regard to their mental habits, peculiarities, and methods of adjustment to surroundings, those pupils who are normal in intelligence.

It is just as important to adjust instruction to meet the needs of the child in the sphere of will and emotion as it is in that of intelligence. If this is done not only will the normal child acquire habits that will contribute to his success and happiness all through life, but the child who is by heredity predisposed to mental disease may be able to avoid a mental breakdown. It is not a contraindication that in most instances it is impossible to separate out the latter group because the training that is valuable to the child normally constituted is exactly that needed by the child with bad heredity.

It is also possible by proper instruction to do something toward preventing those mental disturbances that are caused by syphilis, alcohol, and drugs.

The article is written by a well-informed layman for the lay reader, and will be found valuable by parents, teachers, and those interested in social service work.

DECLINE OF ALCOHOL AS A CAUSE OF INSANITY. By HORATIO M. POLLOCK. *Psychiatric Bulletin*, April 1917.

The author bases his conclusion that there has been a decline in alcohol as a cause of insanity on the results of a statistical study of the 58,011 patients admitted to New York state institutions between October, 1908, and July, 1916.

"The most striking fact shown by the table* is the gradual decrease in the percentage of cases of alcoholic insanity annually admitted from 1909 to 1915. In 1909, the percentage of alcoholic cases among all admissions was 10.1; in 1910, 9.8; in 1911, 9.7; in 1912, 9.4; in 1913, 9.0; in 1914, 7.0, and in 1915, 5.4. In 1916 there was a slight change in the trend and the percentage rose to 5.7. It will be noted that the annual decrease was slight down to 1913, but very marked during the two succeeding years. The percentage of alcoholic cases among re-admissions is constantly lower than among first admissions but the reduction during the period was very similar in the two groups.

"If the facts concerning the decrease in alcoholic insanity above set forth stood alone they might be interpreted as being due to changes in diagnosis rather than to changes in the use or influence of alcohol. Additional light is thrown on the matter by the record of the intemperate use of alcohol by first admissions during the eight-year period as shown by Table 2. It appears from this table that 11,301, or 24.8 per cent, of the 45,661 first admissions used alcohol to excess. Among the males the percentage was 36.8, and among the females, 11.2. Comparing the yearly percentages of excessive use, we note a general decline from 1909 to 1916, with the exception of 1910. In that year the term 'habit disorder' was used in tabulating instead of 'intemperate use' and moderate drinkers were included. The trend in the use of alcohol is clearly shown by the data for the other years. In 1909, the percentage reported as using alcohol to excess was 28.7; in 1911, 24.3; in 1912, 23.8; in 1913, 23.5; in 1914, 20.5; in 1915, 18.7; and in 1916, 18.5. Here again the decrease became more marked in 1914 and continued the succeeding year.

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* Table 1.

"The foregoing data give comparisons year by year between the alcoholic patients and the non-alcoholic. The rate of new cases with alcoholic psychoses per 100,000 of general population in 1909 was 6.3; in 1910, 6.4; in 1911, 6.4; in 1912, 6.0; in 1913, 6.0; in 1914, 4.8; in 1915, 3.6; and in 1916, 4.0. The reduction in rate was most marked in 1914. A further reduction occurred in 1915 but the downward trend ended here and a slight rise is observed in 1916."

THE NECESSITY FOR MEDICAL EXAMINATION OF PRISONERS AT THE TIME OF TRIAL. By PAUL E. BOWERS. *Journal of Sociologic Medicine*, June 1917.

The writer advocates the examination of prisoners before trial from the standpoint both of justice to the accused and of economy to the state. It is obviously wrong, he states, to bring to trial those who are not responsible because of mental defect or insanity. The proper places for these persons are special hospitals, and not jails from which they will be discharged as soon as their sentences have expired and regardless of whether they still are a menace to society. They present problems which are for the psychiatrist and not for the judge to solve.

Furthermore, the saving to the state in the avoidance of useless trials would be considerable. The writer refers to an investigation of his own made on one hundred recidivists, all of whom had been convicted four or more times. He found that twelve of these were insane, twenty-three feebleminded, and ten epileptic. Altogether 180 trials had been held for these abnormal persons at an estimated cost of $180,000. He makes the statement that 75 per cent of the men who appear before the disciplinary officer of the Indiana State Prison are mentally defective.

He advocates such a revision of the laws as would make it possible for the court to have in its personnel a competent psychiatrist whose duty it should be to examine each prisoner at the time of his arrest and trial.

THE PSYCHOPATHIC EMPLOYEE; A PROBLEM OF INDUSTRY. By MARY C. JARRETT. *Medicine and Surgery*, September 1917.

After comments upon the lack of recognition, on the part of most employers, of psychopathic conditions among employees, and upon their ignorance of the important effects of such conditions upon industrial efficiency, Miss Jarrett outlines the work carried on for two years by the Social Service Department of the Boston Psychopathic Hospital to investigate the industrial difficulties of some of its patients. This work was in two parts—intensive social care of a few cases, and investigation of the industrial histories of many. Miss Jarrett says: "The group chosen for study was men between the ages of twenty-five and fifty-five, who had not been industrially disabled up to the time of the illness that brought them to the hospital. The industrial history has been obtained from both patient and employers. A tentative report of the first one hundred cases studied was written by Dr. Adler and published in the first number of *Mental Hygiene*, January, 1917. . . . The other section of the work, confined to a small group of patients, has been an effort to adjust the patient to his occupation." After giving a few statistical summaries of interesting data brought out in the study of these patients, Miss Jarrett cites some of the cases themselves. The article is followed by a series of charts prepared to give a quick view of results of social work in psychopathic cases of this kind.

ORGANIZATION OF PSYCHOPATHIC WORK IN THE CRIMINAL COURTS. By HERMAN M. ADLER. *Journal of Criminal Law and Criminology*, September 1917.

There seems to be an increasing tendency on the part of courts to concentrate attention on the criminal rather than on the crime. In pronouncing sentence the judge is now apt to consider not how best to punish the accused for his crime, but what course of procedure is most likely to make of him a permanently law-abiding citizen. The writer points out the value of a psychiatrist's working in connection with the court as follows:

"Psychopathic work in connection with the criminal courts accomplishes two purposes. In the first place, it classifies the individual delinquent or criminal not according to the type of his act nor according to the amount of damage done, but according to the elements of his personality. In other words, it attempts to disclose the underlying causes of the particular act which brought the delinquent into court. In the second place, on a basis of such facts as this examination discloses, a plan of treatment may be devised to suit the needs of this particular individual rather than the general requirements of his type.

"One of the reasons why psychopathic laboratories in connection with criminal courts are still open to objection by a large proportion of the legal profession, is probably because up to the present the emphasis has been laid almost entirely upon the classification of criminals. Such classification, while of scientific value, is after all largely academic, unless it is made the basis of treatment.

"In medicine the diagnosis is apparently over-emphasized at times, at least in the eyes of the layman, merely because if once a correct diagnosis has been established the proper treatment is a comparatively obvious matter.

"It is toward this latter side of the work that the energies of the community must be bent so that the scientific classification of criminals by scientists may be made of practical use to the courts."

A psychopathic clinic in connection with the courts will yield results in direct ratio to the amount of money expended. It should be sufficiently equipped with personnel to be able to cover every case brought before the court. There should be psychiatrists for mental examinations and psychologists for mental testing. There should be a sufficiently large social service staff to gather information concerning the surroundings from which the prisoner comes, to take care of the follow-up work, etc. In charge of the clinic should be a trained psychiatrist not only with executive ability but with a mind capable of appreciating and working out new problems as they arise. A special building in which baffling cases could be detained until they had been properly studied would be necessary. One such institution could be made to serve a number of courts.

The preliminary outlay and the running expenses for such plan would be large; but the results would be commensurate both from a moral and from a financial standpoint. It would be possible to give to the judge, at the time of trial, information as to the prisoner's mental condition and advice as to the proper disposition if the prisoner happens to be abnormal. Those sent to institutions could be kept under observation and those discharged on parole or on probation could be helped in readjusting themselves.

Unfortunately it has not yet been possible to arouse public interest sufficiently to assure adequate support from the city or state for this program. The clinics now in existence are largely supported by private contributions.

FIFTH ANNUAL REPORT OF THE BOSTON PSYCHOPATHIC HOSPITAL. Reprinted from the Eighth Annual Report of the Boston State Hospital for the Year Ending November 30, 1916. Report of Director. Pp. 36–37; 46–47.

"One of the most important reasons for establishing the Psychopathic Hospital in its place in the Longwood group of medical institutions was the effect which its material and ideals would have upon the future practitioner, namely, upon the medical student. There can be no question that the students of the local medical schools are now getting an insight into mental disease such as their predecessors in mental training have often failed to get until they were many years out in practice. It will be recalled that no physician is allowed to make a certificate of insanity (by the provisions of section 32 of chapter 504 of the Acts of 1909) unless he has been in the actual practice of medicine for three years after graduation. This doubtless wise provision of the law, embodied as it is in the law of numerous other states, seems to prove that the public would have no confidence in such a certificate unless a man had become somewhat matured in his attitude to the public, social and medical problems of insanity. It is a curious thing that the medical graduate of the present time in Boston, in Ann Arbor and in Baltimore is probably far better able to make a certificate in insanity upon graduation than any of the graduates in medicine of much greater age and more mature experience. The mental cases are taken by the student no longer as *curiosa*, but as medical problems. There can be no doubt that observations of the medical men made thus early in their medical training upon public and social problems will give physicians of the future in our community a much superior and more effective grasp of public and social problems, will make them public-spirited, and will tend, as the phrase is, to socialize them; but more important still, these practitioners will be able early to cope with the problems of feeblemindedness at an early age in their patients, with the problems of alcoholism and delirium tremens as seen in general practice, and with the highly important matter of early treatment of syphilis of the nervous system. What effect this may have on the future intake of the insane into our district hospitals is a matter for conjecture only. It may be that our district hospitals will never diminish the number of patients taken in, and they may even increase the number, but it is possible that the quality of the cases admitted will gradually alter in such wise that milder and milder and more and more incipient cases will be referred to state hospitals by physicians having confidence that the highest grade of psychopathic hospital service is available for cases demanding it, and that the highest grade of receiving ward service will be immediately available for cases requiring direct commitment to the district hospitals.

"One effect of our recent work has been to widen the scope of the Psychopathic Hospital activities thus: whereas there were in 1915, 514 regular court commitments to the Boston State Hospital out of 721 regular commitments in all, during the present year, 1916, there have been 399 commitments to the Boston State Hospital out of the larger total number, 831, of regular court commitments. The number of temporary-care cases has increased at this time from 1,083 to 1,213, but this increase has been largely from non-metropolitan districts. The argument is plain that the extension of the psychopathic hospital grade of service is gathering force. . . .

"The social service department is integrally connected with the wards as well as with the out-patient department, but on account of the extramural work of the social service, the administrative and external connections of the social service are more intimate with the out-patient department than with the wards. The out-patient department of the Psychopathic Hospital is now a permanent and established feature of an organization so systematized that we can somewhat closely estimate in advance the work done. There were 1,485 new cases in the out-patient department, an advance upon the figures of last year (1,426). It is remarkable that although no concerted effort toward publicity of this department among the laity has been made, 167 people resorted to the out-patient department on their own initiative; 40 others were sent to the hospital at the suggestion of laymen not connected with public or private agencies; 104 patients were referred by physicians; 364 by public organizations devoted to charity; 193 by hospitals (either by physicians or social service departments); 97 from courts and 69 from schools.

"Of after-care cases there were 220 from the Psychopathic Hospital itself and 30 from other State hospitals. Quite the most considerable problem in the out-patient department is the question of mental defect, for which no less than 474 cases were referred. This feature of the out-patient department indicates what value the community attaches to our psychological examination, executed, we believe, upon a more systematic basis than elsewhere, except at the Waverley School for the Feebleminded, itself. Another rather extraordinary feature was that 209 cases were referred to the out-patient department on account of a question whether syphilis of the nervous system was present, and if syphilis was present whether treatment for the patient or the family could be instituted. There were 152 cases referred or resorting for psychoneuroses, and 66 cases for speech defect. There were 88 cases of delinquency, 41 of which were sexual.

"If we attempt to analyze the out-patient cases from the standpoint of the social problems presented, we find that a question of medical diagnosis with a view to the rendering of a social decision leads with a list of 464 cases. Four hundred and thirty-five cases brought up the question of institutional care. Other social problems, such as juvenile delinquency, illegitimacy, sex delinquency, bad home conditions and unemployment, are represented in our groups. For those who feel that social problems are of infinite dimensions, and that perhaps no case is without its problem, socially speaking, it is remarkable to note that no less than 361 of the 1,485 new cases in the out-patient department presented no social problem worth public consideration.

"The picture of the out-patient activities is not complete without analysis of the new patients. The resort of new patients (1,485 in all) ranges in months from 93 to 160, but there were in all 9,261 visits by patients during the year, the monthly rate varying from 678 to 938. Accordingly, on each out-patient day there are on an average 32 visits by patients. Those who are familiar with the operation of out-patient departments in general must remember that 32 mental patients in an afternoon, whether their problems are new or old, form a considerable mass of difficult public, social, individual and medical problems for any staff to handle. These cases cannot be dismissed with placebo or fragmentary advice. The standard has been maintained of mental tests where required, of Wassermann examinations of the blood where required, of elaborate history-taking and of systematic recording. Meantime the individuality of the patient must not be forgotten."

THE FEEBLEMINDED. By WALTER E. FERNALD. *Educational Review*, September 1917.

". . . In some respects, our present plans of dealing with feeblemindedness recall Charles Lamb's story of the oriental method of purveying roast pig. Surely, it is no longer necessary to burn down the house every time we wish to put roast pig on the menu. This conference is really a checking-up of our knowledge and a mobilization of our resources, preliminary to a concerted and correlated drive upon feeblemindedness all along the line. All of the people who come in contact with the feebleminded feel the need of some organization, perhaps some governmental authority, for the supervision, protection, education, assistance and control of all the feebleminded persons in the state who are not properly cared for by their friends. This proposal is not so radical as it seems, for a large proportion of feebleminded persons at some time in their lives now come under the jurisdiction of public authorities or private societies as dependents or as irresponsible law-breakers. Many feebleminded persons eventually become permanent public charges. Many run the gauntlet of the police, the courts, the penal institutions, the almshouses, the tramp shelters, the lying-in hospitals, and often many private societies and agencies, perhaps eventually to turn up in the institutions for the feebleminded. At any given time, it is a matter of chance as to what state or local or private organization or institution is being perplexed with the problems they present. They are shifted from one organization or institution to another as soon as possible.

"At present, there is no bureau or officer with the knowledge and the authority to advise and compel proper care and protection for this numerous and dangerous class. This class of the feebleminded might be supervised by some existing organization like our Commission on Mental Diseases, or perhaps a State Board of Health, or by a special board or official; but the responsible officer should be a physician trained in psychiatry, with special knowledge of all phases of mental deficiency, and its many social expressions. The local administration of this plan could be carried out by the use of existing local health boards, or other specially qualified local officials, or, perhaps better, by the utilization of properly qualified volunteer social workers, or existing local private organizations already dealing with social problems. This systematic supervision and control could easily be made to cover the entire state, and would obviate the present needless, costly and futile reduplication of effort. The first duty of the new officer or bureau would be to state the problem fully by beginning a complete and continuing census of the feebleminded of the entire state. The recent surveys made in several cities and states, notably in Chicago, New York, Pennsylvania, Michigan and New Hampshire, show the feasibility of such a census. The assembling of existing data and records of physicians, mental clinics, court and prison officials, social workers, private societies, town officials, overseers of the poor, and special class teachers, would make an impressive beginning of the census. In Boston, the League for Preventive Work, representing sixteen private societies dealing with social problems, has begun such census and in a little over a year's work, has assembled data concerning over 1,000 feebleminded persons met with in their work during this period.

"Our compulsory school laws now bring every child to official notice. The school census alone, including as it does every child in the community, whether he goes to school or not, would in a very few years reveal and record the existence of nearly every feebleminded person. Such registration would be merely analogous to the required notification and record of cases of infectious and contagious disease. This co-ordination of existing records would be available for social workers, school authorities and other agencies, and would be of enormous service in the solution of the individual problems which the feebleminded constantly present. This, alone, would mean a great saving in time, effort and money. Once a person was adjudged feebleminded, a permanent accessible record would be made. This continuing census and registration of the feebleminded would make possible regular visitation of each defective who needs oversight by the trained social worker or by the local representative of the central bureau or board. The reports of these visitors, covering the life histories and family histories of many cases, would soon constitute an invaluable treasury of information as a basis for scientific research and study in the search for practical methods of prevention. The registration of every feebleminded person, and the regular visitation, especially of children of school age, would make it possible to inform the parents of the condition of the child, of the necessity of life-long supervision, and of the possible need of future segregation. The official visitor would advise the parents as to the care and management of the defective, and would have opportunity to inform the family, the local officials, and the community generally as to the hereditary nature and the peculiar dangers of feeblemindedness. Suitable, tactful literature could be prepared, which could be gradually presented to the parents in a way that would have great educational value. If necessary, sooner or later, the parents will probably be willing to allow their child to be trained and cared for in an institution. In suitable cases parents who are not willing may be allowed to have the custody of their child, with the understanding that he shall be cared for properly and protected during his life, that he must not be allowed to become immoral or criminal, and that he shall be prevented from parenthood. Whenever the parents or friends are unwilling or incapable of performing these duties, the law should provide that he shall be forcibly placed in an institution or otherwise safeguarded. The local representatives of this central bureau would officially serve as advisors and sponsors for pupils graduated from the special public school classes for defectives, for court cases under probation and observation, and for institution inmates at home on visit or on trial. Under this plan, there would be a person in every locality familiar with the opportunities for mental examination and methods of permanent commitment. The extra-institutional supervision and observation of cases in their homes would do away with the necessity of institution care of many persons who would otherwise have to go to the institution, thus reducing the expense of institution buildings and maintenance of the institution. The expense of this plan of centralized supervision and control of the feebleminded may seem to be an objection, but it is not a valid one, for states like Massachusetts, New York, or Ohio, for instance, are now really wasting vast sums of money annually in haphazard methods of temporizing with the social consequences of mental defect, instead of dealing with the feeblemindedness itself. We are now pouring water on the smoke instead of on the fire. The central bureau would co-ordinate and utilize all the disconnected agencies which now deal with the feebleminded—the special public school classes, the child-helping societies, the mental clinics, the laboratories for social and eugenic research, the court and probation officers, and all the institutions for the feebleminded. The remote mountain village would be as well served as the large cities. The problem of rural feeblemindedness in this state has received very little attention."

NOTES AND COMMENTS

LEGISLATION

California

The 1917 legislature passed an asexualization act amending one enacted in 1913 which repealed the 1909 law. As it now stands, the act provides for the asexualization of inmates of state hospitals for the insane and of the Sonoma State Home before they may be discharged. Provision is also made for the asexualization of any inmate of a state prison under certain conditions, when it would seem to be of benefit to him, in case he is a moral or sexual degenerate or pervert. This act does not apply to voluntary patients in any hospital. By the terms of this act any idiot may be asexualized with the written consent of parent or guardian.

Connecticut

The Commission appointed under a law passed in 1913 to investigate the matter of establishing a reformatory for women reported in favor of it in the assembly of 1915. However, no provision was made for the institution by that body.

The 1917 legislature has passed a law establishing this institution to be known as the Connecticut State Farm for Women. Women over sixteen years of age may be committed to it for any of the following reasons:

1. Convicted of, or pleading guilty to, the commission of felonies.
2. Convicted of, or pleading guilty to, the commission of misdemeanors, including prostitution, intoxication, drug-using or disorderly conduct.
3. Unmarried girls between the ages of sixteen and twenty-one years who are in danger of falling into habits of vice or who are leading vicious lives.

Only such may be committed as are likely to be benefited physically, mentally or morally by such commitment.

A law passed in Connecticut in 1915 (Chapter 294) is worthy of mention. It requires the proper town and city authorities in charge of the poor to have all the inmates of almshouses examined by a physician at least once in six months. In case any insane or feebleminded are found there, proceedings must be initiated for their commitment to the proper institution.

Florida

Acts 7283–7288 passed by the 1917 legislature place greater restrictions on the manufacture, traffic in, possession of, receipt of, transportation of, advertisement of and sale of alcoholic liquors. Another act provides that an application for a permit to sell liquors must be signed by a majority of the white registered voters, and a majority of the colored registered voters residing in the election district wherein the permit is sought.

By the provisions of House Concurrent Resolution 23 (1917), the commission which was appointed, under legislative enactment in 1915, to investigate the need of a state institution for the care of epileptics and the feebleminded is authorized to continue this investigation and to make a complete report at the 1919 session.

House Concurrent Resolution 26 directs the governor to appoint a committee of three citizens to investigate in regard to the location and erection of a new modern hospital for the insane. This committee is authorized to visit and inspect any sites offered as a location and to incorporate in its report all offers of land or money made by any community and to have plans and specifications prepared together with estimates of the cost of construction. They are to report at the next session of the legislature.

Massachusetts

Chapter 275 (1917) restricts the possession, sale, dispensing and administering of drugs.

The Wrentham State School has received an appropriation of $2,000 for the purchase of additional land, and the Gardner State Colony $3,500 for the same purpose.

The Commission on Mental Diseases has received an appropriation of $5,000 for an investigation as to the nature, causes, results and treatment of mental diseases and defects, and the publication of a report thereon.

Michigan

The Michigan Farm Colony for Epileptics has received two appropriations of $69,420 each for the construction and equipment of two cottages to accommodate 100 patients each—one cottage for the year 1918 and one for 1919. An appropriation of $35,000 has been made for a storehouse, bakery and meat market with $7,000 for their equipment.

The following appropriations for the state hospitals are worthy of mention:

Ionia State Hospital, $2,725.73 for purchase of additional land.

Kalamazoo State Hospital, $15,000 for a new laundry building and $26,654 for its equipment.

Newberry State Hospital, $35,000 for a new cottage.

Pontiac State Hospital, $74,000 for a new cottage.

Traverse City State Hospital, $14,461.50 for farm land.

Act 259 (1917) provides for the establishment and maintenance of the Michigan State Training School for Women to which women over sixteen years of age convicted of violating any penal statute of Michigan may be committed. The bill carries an appropriation of $100,000.

Minnesota

By the terms of a law passed in 1917, if a child who has been adopted develops, within five years after adoption, feeblemindedness, epilepsy, insanity or venereal infection as a result of conditions existing prior to his adoption, of which the adopting parents had no knowledge or notice, the adoption may be annulled and the child committed to the guardianship of the Board of Control.

Compulsory commitment of the feebleminded is provided for by Chapter 344 of the Laws of 1917. The provision for voluntary admission, obtaining previously, is retained, and the superintendent is given the power to detain any person admitted upon his own application as though he were committed.

New York

A bill which was enacted in the last session of the legislature makes it a misdemeanor for any one, except boards of health, licensed hospitals and dispensaries, to advertise in any way concerning venereal diseases.

Dr. Chester Carlisle, Senior Assistant Physician of Kings Park State Hospital, has been appointed Superintendent of the Division of Mental Defectives and Delinquents of the New York State Board of Charities. This division was created by legislative enactment in 1917.

Ohio

The state hospitals for mental diseases at Athens, Dayton and Massillon have received an appropriation of $10,000 each for a cottage for tuberculous patients.

A building for industrial betterment at the Columbus State Hospital has been provided for by an appropriation of $15,000 made by the 1917 legislature.

Pennsylvania

Act 59 (1917) permits the certificate of a physician as to the insanity of a patient to be sworn to before a judge or magistrate of any county, instead of limiting it to a judge of the commonwealth as formerly.

Act 259 (1917) amending one passed in 1913 to establish a state village for feebleminded women, removes the age restrictions, formerly between sixteen and forty-five years, and also provides that the maintenance expenses, in the case of an indigent feebleminded woman, must be borne by the county, and not the commonwealth as formerly.

By the terms of Act 131 (1917) an indigent patient discharged from a state hospital for the insane receives from the hospital the amount of the travelling expenses to his home.

Act 399, which establishes nine county industrial farms, workhouses and reformatories, provides a separate apartment in each for inebriates.

By the terms of Act 274 (1917) the Western State Hospital for the Insane, established by legislative enactment in 1915, is authorized to receive as patients only those transferred from other hospitals for the insane.

The expenses incident to the commitment, removal and maintenance of the criminal insane will hereafter be a charge upon the county in which the crime was committed. The county, however, may recover these expenses from the estate of the patient, or from relatives liable for his support; but no such recovery may be had from the poor district in which the person had legal settlement.

In 1913 an act was passed to provide for the selection of a site and the erection of a state institution for inebriates. The 1917 legislature has appropriated $25,000 for this institution as follows: $100,000 for the purchase of land, improvement, water-mains, sewers and drainage pipes; $150,000 for the construction of buildings of which amount the governor approved $100,000.

South Carolina

Legislation enacted in 1917 aims to suppress intemperance and to prohibit the manufacture, sale and use of alcoholic beverages. One law makes it illegal to advertise them on street cars, railroads or vehicles, at public resorts, on billboards or circulars, and in newspapers and periodicals; and another regulates their transportation, storage and possession.

Act 121 (1917) provides for a board of regents for institutions for the insane. This board is to consist of five members appointed by the governor with the advice and consent of the senate.

Tennessee

Chapter 2 (1917) prohibits the receiving of orders for the purchase of alcoholic liquors, whether the liquors are in Tennessee or in some other state. This act became effective July 1, 1917.

Chapter 3 makes it unlawful for any person, firm or corporation to have intoxicating liquors intended for sale, after July 1, 1917.

Chapter 4 restricts the use of liquors for clubs, lodges and associations to one half of one per cent of alcohol.

Chapter 5 provides for imprisonment in the state penitentiary for from one to two years for persistent violators of the law against selling intoxicating liquors as a beverage within four miles of a schoolhouse where a school is kept in the state.

Chapter 12 prohibits the receipt of intoxicating liquors from a common or other carrier, the possession after received and the shipment into the state or between different points within the state.

Chapter 115 provides for the extradition of persons of unsound mind.

The general appropriation bill provides $20,000 for two years to be expended in enforcing the prohibition laws. This sum may be used, with the governor's approval, for engaging special employes for this purpose.

Wisconsin

Chapter 235 (1917) requires physicians to report cases of venereal disease to the state board of health and to inform patients having these diseases of the danger of infecting others. The state board of health is authorized to commit infected persons refusing treatment to a suitable institution. Counties must care for indigent patients. Diagnostic work is to be free of charge.

Chapter 483 provides that no person having been afflicted with venereal disease shall be granted a marriage license, unless he can produce a certificate issued by an approved laboratory that he is not in an infective stage of the disease.

The Manitoba government will establish shortly a home for the feebleminded at Selkirk.

A movement is gaining momentum in Norfolk, Virginia, to give special instruction to mentally defective children in the public schools.

The board to locate the new Northwest Texas Insane Asylum, consisting of the governor, lieutenant governor, and the attorney general, are receiving applications from different cities. The board states that accessibility, convenience for the greatest number of inhabitants, water supply, building material, fuel supply, fertility of soil and healthfulness of location must be considered. Sites must contain at least 500 acres and be in the northwestern part of the state as defined by the law creating this institution.

Additional special classes for feebleminded are to be established in Cleveland, Ohio. All children suspected of being feebleminded are to be examined. There are at present about 600 defectives in 30 special classes in the city.

Two wards have been set aside at the Cook County Psychopathic Hospital, Illinois, for the care and treatment of mentally affected children. Nurses will be supplied from state and county service, and occupational work will be provided. This is regarded as an emergency measure, and the state will be asked at the next session of the legislature to provide more adequate facilities.

Of 2,500 cases recently investigated at the psychiatric clinic of the Toronto General Hospital, 1,842 proved to be mental defectives, 51 per cent of whom were immigrants.

A movement has recently been started in Halifax, Nova Scotia, to establish additional special classes for mentally defective children. At present classes have been provided for about one fourth of the mentally defective children in the city.

The department of health of New York City has arranged to treat all patients suffering from drug addiction who apply at one of the city institutions. Co-operation is assured from the department of charities, Bellevue and Allied Hospitals, the board of inebriety and other city departments. The department of health will examine and prescribe or dispense drugs to addicts appealing to it, if such prescriptions are necessary, pending their admission to an institution or their treatment by a physician.

The new Iowa state hospital for epileptics has been completed and was opened on September 3. This institution comprises a group of one and two-story cottages, erected at a cost of over $500,000, with a site of 1,000 acres. It is located at Woodward about 25 miles from Des Moines.

The superintendent of schools of Berkeley, California, is making a survey of the schools to determine the number of children needing special training. Although only a preliminary investigation has been made, the conclusion has been reached that the number of mentally deficient children warrants the establishment of a clinic.

County supervisors in California have been urged by the state health department to provide in their annual budgets for hospital facilities for the care and isolation of patients suffering from venereal diseases. It is noteworthy that the governor has appropriated $60,000 from the state war emergency fund toward the control of these diseases.

On September 24 the cornerstone was laid for the first of eleven new buildings which are under construction at Randall's Island, for the New York City institution for the feebleminded. Some of the buildings which these new ones are replacing were erected fifty years ago.

Six large tracts of land—almost 150 acres in all—adjoining Byberry Farms have been purchased by the city of Philadelphia as sites for additions to the home for the indigent and hospital for the insane.

Many of the larger cities in Pennsylvania are taking steps toward the establishment of free mental clinics.

The building for male patients at the Wyoming State Hospital was destroyed by fire on September 14. A temporary building is being erected while awaiting plans for a new $150,000 structure.

The Wisconsin State Medical Society, in session in Milwaukee early in October, passed a resolution indorsing the plan to establish a state society for mental hygiene affiliated with The National Committee for Mental Hygiene.

The department of nursing and health at Teachers College, New York, has organized classes for the instruction of teachers, nurses, and social workers to meet the demand for teachers for the re-education of returned invalided soldiers and sailors.

As a result of examinations made voluntarily by Dr. Clinton McCord, a bill to establish a psychopathic clinic for the Albany County Court is being fostered by Judge Addington and will be presented at the next session of the legislature.

ADDITIONAL UNGRADED CLASSES FOR NEW YORK CITY

The board of education of New York City has requested from the board of estimate and apportionment an appropriation to provide for thirty-six additional ungraded classes for defectives. More than 1,300 children are reported as ready for these classes and it would require 89 classes to take care of them; but as there are only 36 rooms available the request is for that number of classes only.

The first special class was established in 1900 in one of the public schools in Manhattan for pupils unable to do regular grade work. At first this class included mental defectives and others; but later the others were removed until finally only children who were subnormal mentally were included. Additional ungraded classes were organized each year, and in 1906 a department of ungraded classes was created in the board of education. There are at present 224 such classes, with 4,107 pupils.

Clinics for venereal diseases have been established by the New York City department of health in each borough of the city. These clinics at the present time are for diagnosis and advice only. It is hoped that treatment may be instituted later. Under the supervision of the department of health, a hospital is being built in which will be segregated patients suffering from venereal diseases who refuse to co-operate in treatment. In order to have further control over the venereal disease problem in the city, the department has ruled that no treatment or diagnostic clinic for communicable diseases may be opened in the city without the consent of the department. Laboratories for diagnostic purposes cannot be opened unless the personnel and equipment is satisfactory to the department.

A psychiatric clinic is to be established on Staten Island with a resident psychiatrist in charge. This clinic will serve the department of education, the children's court and the department of charities, as well as the purposes of a general psychiatric clinic for the diagnosis and treatment of mental and nervous disorders and mental defect.

The Children's Bureau of the United States Department of Labor has recently published a report based on a study of mental defectives in Newcastle County, Delaware. This report reveals a close connection between poverty and mental defect, emphasizes the need of special training and permanent provision for institutional care and special protection for this class. Of the 212 cases of mental defect studied, only four or five were in well-to-do families; 62 per cent were at large in the community and only 5.7 per cent were in an institution for the feebleminded. The majority of these cases were found in an environment making normal standards of living impossible.

An ordinance passed in June by the City Council of Chicago, requires that physicians must report all cases of venereal diseases to the department of health; that the physician, under penalty of a fine of $200, must give to each patient suffering from venereal disease, a booklet prepared by the department which deals with the subject; that each physician must keep in touch with his patients, and that if a patient absents himself from treatment for ten days, the department of health must be notified, the name and address of the patient being given.

UNIFORM STATISTICS

The Committee on Statistics of the American Medico-Psychological Association, which was appointed at the meeting of the association at Niagara Falls in 1913 to draw up a plan for uniform statistics in regard to mental diseases, agreed upon a classification and a set of standard statistical forms to be used in reporting data. The report of the committee was submitted to the association at its New York meeting in May, 1917, and unanimously adopted. The New York State Hospital Commission and the Massachusetts Commission on Mental Diseases have already adopted the classification of mental diseases worked out by the committee, and it is hoped that the other states will fall in line soon, that scientific studies may be made supported by reliable data.

The lack of uniformity in the statistical tables in the annual reports of the various institutions in this country do not permit deductions of a cumulative or comparative nature between the institutions in the several states. Through a uniform method of statistical study it will be possible to secure from the great wealth of material available in our hospitals, information which will aid very greatly in advancing our knowledge of psychiatry and serve as a basis for constructive work in raising the standard of the care of the insane and in the work of prevention and reform.

OUT-PATIENT DEPARTMENTS, MASSACHUSETTS STATE HOSPITALS

During the months of July, August and September, over 1,100 patients visited the mental clinics maintained by the Massachusetts State Hospitals. Of this number, about 550 came for their first visit. It is interesting to know that about 60 came on their own initiative. Over 50 were referred to the clinics by physicians; over 100, by charitable and other organizations; 20, by the schools; and 15, by the courts. About 40 came from other hospitals, and over 150 were patients discharged from the state hospital and reporting to the clinic for the first time. Over 2,000 visits were made to these clinics during these months.

For this same period, over 800 patients were discharged to after-care from the Massachusetts State Hospitals, and social service workers made over 1,500 visits to discharged patients. In this period over 30 were placed in families and over 50 returned from family care to the hospitals. Over 300 who had previously been boarded out were visited during these three months.

MILITARY NEURO-PSYCHIATRY

In June, 1917, there were in England from 160,000 to 170,000 pensioners. Colonel Sir John Collie, President of the Special Medical Board for Neurasthenia and Allied Nervous Disorders, and Director of Institutions for Neurasthenia under the Ministry of Pensions, estimates that roughly 20 per cent of these pensioners are suffering from functional nervous diseases.

Major Pearce Bailey, Chairman of The Mental Hygiene War Work Committee of The National Committee for Mental Hygiene is now on duty in the office of the Surgeon-General in charge of the neuro-psychiatric work in the army.

Major Thomas W. Salmon, Medical Director of the National Committee for Mental Hygiene, is on duty in the office of the Surgeon-General.

Over 260 psychiatrists and neurologists have been commissioned in the Medical Reserve Corps and are now on duty in the various American camps weeding out recruits who are unfit for military duty because of neuropathic or psychopathic conditions.

Lieutenant Horatio M. Pollock, S.C., Statistician of the New York State Hospital Commission, is in charge of the statistical work in the division of neurology and psychiatry in the office of the Surgeon-General.

Psychopathic wards have been provided in the base hospitals at Camp Devens, Ayer, Massachusetts; Camp Upton, Yaphank, Long Island, New York; Camp Dodge, Des Moines, Iowa; Fort Sam Houston, Texas; and Fort McPherson, Georgia. The Psychopathic Hospital at Camp Devens is in command of Major L. Vernon Briggs, formerly Secretary of the Massachusetts State Board of Insanity. Major Briggs is assisted by Captain Douglas A. Thom of the Grafton State Hospital and Captain Morgan Brewster Hodskins of the Monson State Hospital. At Camp Upton, Major Graeme M. Hammond of New York City is in command, assisted by Captain A. J. Rosanoff of the Kings Park State Hospital and Lieutenant Richard S. Pearse of New York City. The hospital at Camp Dodge is under the direction of Captain Edmund M. Baehr of Cincinnati. Lieutenant D. E. Singleton, formerly Assistant Superintendent, State Hospital No. 1, Fulton, Missouri, and Lieutenant Philip Work of Denver, Colorado, are on duty at this hospital. Captain Gordon Fay Willey of the Kalamazoo State Hospital and Lieutenant Paul R. Sheppard of San Antonio, Texas, are on duty at Fort Sam Houston. Captain Earl D. Bond of the Pennsylvania Hospital, Philadelphia, is in charge of the neuro-psychiatric work at the base hospital, Fort McPherson, assisted by Lieutenant K. M. Bowman of the Bloomingdale Hospital and Lieutenant Victor J. P. Jourdan. Each of these hospitals has been built in accordance with specially prepared plans and each is well equipped with hydrotherapeutic, electrotherapeutic and other apparatus necessary for the proper care and treatment of patients suffering from nervous and mental disease. Neuro-psychiatric wards are being constructed at each of the cantonments as a part of each base hospital.

Lieutenant Dudley C. Kalloch, formerly an assistant in the Psychiatric Clinic at Sing Sing Prison, is on duty at Camp Lee, Petersburg, Virginia.

Lieutenant Francis M. Shockley, formerly an assistant at the Psychiatric Clinic at Sing Sing Prison and more recently Director of the Psychiatric Clinic at the Westchester County Penitentiary, and Lieutenant J. P. Eidson of the Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, Baltimore, are in charge of the psychiatric examinations at Camp Sevier, Greenville, South Carolina.

Captain Samuel Leopold of Philadelphia and Lieutenant H. A. Reye, formerly of the State Psychopathic Hospital, Ann Arbor, and the Pontiac State Hospital, Michigan, are on duty at Camp Wadsworth, Spartanburg, South Carolina.

Major R. M. Van Wart of New Orleans, Captain Jesse M. W. Scott, formerly of the Matteawan State Hospital, Lieutenant W. I. Lillie of the State Psychopathic Hospital, Ann Arbor, and Lieutenant Milford Levy of New York City are on duty at Camp Sheridan, Montgomery, Alabama.

Major George B. Campbell of the Utica State Hospital is in charge of the neuro-psychiatric work at the base hospital, Camp Pike, Arkansas.

Lieutenant Harold W. Wright of San Francisco, formerly of the Manhattan State Hospital, is on duty at Camp Kearney, Linda Vista, California.

Lieutenant E. A. Strecker of the Pennsylvania Hospital, Philadelphia, is on duty at Camp Hancock, Augusta, Georgia.

Captain Egbert W. Fell, formerly of the Boston Psychopathic Hospital, and more recently of the Elgin State Hospital, is in charge of the psychiatric examinations at Camp Grant, Rockford, Illinois.

Lieutenant R. M. Chambers of the Westboro State Hospital is directing the work of the psychiatric clinic at the Disciplinary Barracks, Fort Leavenworth, Kansas. This is the clinic organized by Major Edgar King, U.S.A., now on duty in the office of the Surgeon-General.

Major Milton Board of Louisville, Kentucky, Captain Morris J. Karpas, Director of the Psychopathic Clinic at the Children's Court, New York City, and Lieutenant Earl Moorman of the Central Indiana State Hospital, Indianapolis, compose the personnel of the psychiatric unit at Camp Zachary Taylor, Louisville, Kentucky.

Captain Mortimer W. Raynor, Clinical Director of the Manhattan State Hospital, and formerly Director of the Psychiatric Clinic at the New York City Prison, Blackwell's Island, is in charge of the examining at Camp Meade, Annapolis Junction, Maryland.

Captain Frank D. Ferneau, formerly of the Toledo State Hospital, has under his direction the psychiatric work at Camp Custer, Battle Creek, Michigan.

The psychiatric examining at the Recruit Depot, Jefferson Barracks, St. Louis, is under the direction of Lieutenant James F. McFadden, formerly of the Boston Psychopathic Hospital, more recently an assistant physician at the Foxborough State Hospital.

The work at Camp Shelby, Hattiesburg, Mississippi, is in charge of Lieutenant Robert F. Zimmerman of the Psychopathic Laboratory, Police Department, New York City.

Major E. Stanley Abbot, who has been in charge of the psychiatric examining at the Officers' Training Camp, Fort Snelling, Minnesota, has been ordered to Camp Sherman, Chillicothe, Ohio, where he will be in command of the psychiatric unit.

Major Menas S. Gregory, Director of the Psychiatric Clinic at Bellevue Hospital, New York City, has had under his supervision the special examinations at the Plattsburg Officers' Training Camp.

Major H. A. Cotton, Superintendent of the New Jersey State Hospital at Trenton, is in command of the neuro-psychiatric unit at Camp Dix, Wrightstown, New Jersey.

Captain E. G. Zabriskie of New York City conducted the special examinations at the Officers' Training Camp at Fort Niagara, New York.

Lieutenant Paul V. Anderson of Richmond, Virginia, and Lieutenant A. P. Chronquest of the Danvers State Hospital are on duty at Camp Green, Charlotte, North Carolina.

The psychiatric work at the Recruit Depot, Columbus Barracks, Columbus, Ohio, is under the direction of Captain E. L. Hanes of Rochester, New York.

Lieutenant Thomas J. Heldt of the Manhattan State Hospital and Lieutenant Harry R. Hoffman of Chicago are on duty at Camp Doniphan, Fort Sill, Oklahoma.

Major Richard H. Hutchings, Superintendent of the St. Lawrence State Hospital, is in command of the psychiatric unit at Camp Jackson, Columbia, South Carolina.

Major John H. W. Rhein of Philadelphia and Lieutenant George A. MacIver, formerly of the Boston Psychopathic Hospital, are on duty at Camp Travis, San Antonio, Texas.

Lieutenant George H. Preston of the Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, is on duty at Camp McArthur, Waco, Texas.

Major Ross Moore of Los Angeles, California, is in charge of the psychiatric work at Camp Lee, Petersburg, Virginia.

Captain Sanger Brown, II, of the Bloomingdale Hospital is on duty in the office of the Surgeon-General, division of neurology and psychiatry.

Major Arthur H. Ruggles of the Butler Hospital, Providence; Major Michael J. Thornton of the Psychiatric Clinic, Bellevue Hospital, New York; Captain Frederick W. Parsons, Hudson River State Hospital, Poughkeepsie; Captain Samuel W. Hamilton, Director of the Psychopathic Laboratory, Police Department, New York City; Captain Roscoe W. Hall, Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, Baltimore; Lieutenant James H. Huddleson, New York Neurological Institute; and Lieutenant J. M. Wolfsohn of San Francisco are in England studying in the hospitals for war neuroses.

Captain Jau Don Ball of San Francisco is in charge of the psychiatric examining at the Presidio.

The psychiatric examinations at Camp Gordon, Atlanta, Georgia, are under the direction of Major Eugene D. Bondurant of Mobile, Alabama.

Lieutenant Louis V. Lopez of New Orleans is on duty at Camp Gordon, Atlanta, Georgia.

Lieutenant Clifford W. Mack, formerly of the Pontiac State Hospital, Michigan, is in charge of the psychiatric examining at the Recruit Depot, Fort McDowell, California.

Psychiatric examinations are being made at the Naval Training Stations in Newport, Rhode Island, Norfolk, Virginia, Chicago and San Francisco. Lieutenant George F. Brewster of the Psychopathic Laboratory, Police Department, New York City, is in charge at Newport; Lieutenant Louis E. Bisch, formerly of the same laboratory, at Norfolk; Lieutenant H. S. Hulbert of the State Psychopathic Hospital, Ann Arbor, at Chicago; and Lieutenant A. Warren Stearns of the Boston Psychopathic Hospital, at San Francisco.

Lieutenant Arnold L. Jacoby, First Assistant Physician, State Psychopathic Hospital, Ann Arbor, has been detailed to duty at the Naval Disciplinary Barracks, Portsmouth, New Hampshire.

Courses in military neuro-psychiatry have been established at the St. Elizabeths Hospital, Washington, D. C., Dr. William A. White, Director; the State Psychopathic Hospital, Ann Arbor, Michigan, Dr. Albert M. Barrett, Director; the Boston Psychopathic Hospital, Dr. E. E. Southard, Director; New York Neurological Institute, Major Joseph Collins, Director; the Psychiatric Institute, Ward's Island, New York, Dr. George H. Kirby, Director; the Philadelphia General Hospital, Dr. T. H. Weisenburg, Director; the Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, Baltimore, Dr. Adolf Meyer, Director.

The classification of mental diseases, adopted by the American Medico-Psychological Association at its meeting in May, has been adopted by the Surgeon-General for use in the United States Army.

PSYCHIATRIC AND NEUROLOGICAL EXAMINATION OF RECRUITS

In detailing psychiatrists and neurologists to special duty with the armies, the Surgeon-General has had in mind (1) the proper care and treatment of soldiers who become incapacitated through mental or nervous disease (2) the special examination of recruits in the training camps in order that those who are unfit for military duty, because of neuropathic or psychopathic conditions, may be identified and discharged from service.

Until the troops move abroad the chief and most important responsibility of the military psychiatrists and neurologists will be the special examination of recruits. It is obvious that no man should be eliminated who is fit to render a valuable service in this emergency. On the other hand, it is quite apparent that individuals suffering from certain forms of nervous and mental diseases should not be permitted to enter into service, as experience with the American armies has shown quite conclusively that such individuals are not capable of military service even in time of peace, and experience in the European armies has shown beyond question that such individuals are not able to withstand the rigors of modern warfare. At critical times such individuals go to pieces, with the result that the military force is weakened, is hampered in the free performance of its function, and the government is likely to be burdened after the war with the care of a large number of invalids.

After careful consideration the Surgeon-General has decided that the following general outline shall be followed in determining the recruits to be excluded because of neuropathic or psychopathic conditions. As it is important that the potential as well as the actual condition of the recruit be kept in mind, emphasis has been laid upon the early symptoms of disease. Likewise, attention has been called particularly to those diseases which are most likely to be met and which have not very obvious symptoms but which, nevertheless, can be diagnosticated relatively easily and with considerable certainty. It is not to be assumed that other neuropathic and psychopathic conditions when found are not cause for exclusion. Most of these, however, such as multiple neuritis, various forms of paralysis, hemiplegia, cranial nerve palsies and peripheral neuritis, have such striking symptoms that they are likely to be recognized before they come to the attention of the neurologists and psychiatrists.

RECRUITS TO BE EXCLUDED

I. Nervous Diseases

(a) *On the Basis of Disease*

1. Tabes. (Look for Argyll-Robertson pupils, absent knee and ankle jerks, ataxia of station and gait.)
2. Multiple Sclerosis. (Look for absent abdominal reflexes, nystagmus, intention tremor.)
3. Progressive Muscular Atrophy and Syringomyelia. (Look for fibrillary tremors; atrophy in the small muscles of the hand and of the muscles of the shoulder girdle; scars on forearm and fingers caused by burning; deformities of feet.)
4. Epilepsy. (Look for deep scars on tongue, face and head; voice. Where diagnosis depends only upon history of epileptic attacks given by the patient, the latter should be asked to give the address of the physician who has treated him. This history must then be verified by a letter from the physician.)
5. Hyperthyroidism. (Look for persistent tachycardia, exophthalmos, tremor, enlarged thyroid.)

(b) *On the Basis of Symptoms or Combination of Symptoms or History*

1. Unequal pupils + irregular pupils + Argyll-Robertson pupils.
2. Nystagmus (in one not an albino) + absent abdominal reflexes + intention tremor.
3. Absent knee jerks associated with some one other organic neurologic symptom.

4. Exaggerated tendon jerks + Babinski.
5. Disorders of station or gait.
6. Disorders of speech (on test phrases) + facial tremor + one other organic neurologic symptom. (Stammering and stuttering *per se* is not significant of an organic neurologic condition. Stammerers and stutterers are rejected by regulations. See form No. 94777.)
7. History of Epilepsy. (Ask the recruit to give the address of the physician who has attended him; this information to be verified by letter.)

II. Mental Diseases

(a) *On the Basis of Disease*

1. General Paralysis. (Look for Argyll-Robertson pupils, speech defect consisting of distortion of words, writing defect consisting of distortion of words, facial tremor in showing the teeth, euphoria and marked discrepancies in giving facts of life.)
2. Dementia Praecox. (Look for indifference, ideas of reference, feelings of the mind being tampered with (*e. g.* ideas of hypnotism), auditory hallucinations, bodily hallucinations such as electrical sensations or sexual sensations, meaningless smiles; in general, inappropriate emotional reactions, lack of connectedness in conversation.)
3. Manic Depressive Insanity. (Look for mild depressions with or without feeling of inadequacy or mild manic states with exhilaration, talkativeness and overactivity.)

(b) *On the Basis of Symptoms or Combination of Symptoms or History*

History of previous mental illness. (Ask the recruit to state when and where he had such illness, in what hospital he was observed or treated or by what physician he was attended; this information to be verified by letter.)

III. Psychoneuroses and Psychopathic Characters

Look for phobias, morbid doubts and fears, anxiety attacks, fatigability, hypochondriasis, compulsions, homosexuality, grotesque lying, vagabondage.

IV. Chronic Alcoholism

Look for suffused eyes, prominent superficial blood vessels of the nose and cheeks flabby, bloated, reddened face, purplish discoloration of the mucous membrane of the pharynx and of the soft palate; also ashen complexion and clammy skin; muscular tremor in the protruded tongue and extended fingers (noticeable also in lack of control when the applicant attempts to sign his name); emotionalism, prevarication, suspicion; auditory or visual hallucinations, paranoid ideas.

V. Mental Deficiency

Look for defect in general information with reference to native environment, ability to learn, to reason, to calculate, to plan, to construct, to compare, weights, sizes, etc.; defect in judgment, foresight, language, output of effort, suggestibility, stigmata of degeneration, muscular incoordination. (Consult psychometric findings.)

VI. Drug Addiction

Look for pallor, dryness of skin; flippancy, mild exhilaration (if under the influence); cowardly, cringing attitude, restlessness, anxiety (if without drug); distortion of the alae nasi; contracted pupils (morphine) or dilated pupils (cocaine); dirty deposit at junction of gums and teeth; bluish and whitish needle scars on thighs and arms.

The attention of line officers has been called to the fact that certain personality traits are of importance as indicative of possible underlying mental conditions, and the officers have been asked to refer to the psychiatrists the following recruits: Irritable; seclusive; sulky; depressed, shy, timid; over boisterous; sleepless; persistent violators of discipline; "queer sticks," cranks; "goats"—butts of practical jokes; "boobs"—those who have difficulty in comprehending orders—dull, stupid; those with marked emotional reaction (such as vomiting and fainting) at bayonet drill; those with peculiarities of attitude, speech or behavior sufficiently marked to attract attention of associates; those resentful of discipline; suspicious; sleep walkers; bed wetters; those persistently slovenly in dress; those who have difficulty in executing muscular movements in setting-up exercises.

RECLAMATION OF DISCHARGED CONSCRIPTS

It is important that conscripts discharged for physical reasons be not thrust back into civil life without guidance or instruction as to their needs. In order that such conscripts may be reclaimed for possible future military service, or that at least their efficiency be increased for civil life, and thus the general health of the community and the background of military defense improved to that degree, the General Medical Board of the Council of National Defense has under consideration a plan that calls for the co-operation of the Medical Corps of the Army, the State Committees and Auxiliary Medical Defense Committee, Medical Section, Council of National Defense and certain national organizations.

It is planned that all conscripts rejected by exemption boards for military service, and all conscripts rejected at the cantonments, and all rejected volunteers, shall receive a standard leaflet entitled, "How to Become Physically Fit: Information for Guidance and Assistance of Those Rejected for Military Service," prepared by the General Medical Board of the Council of National Defense, covering the following salient features:

a. Urgent need of giving attention to defects, in interest of self and country.

b. Brief, terse explanation of the principal causes of rejection to be given, and instructions as to significance and measures of relief; importance of medical or surgical treatment, and measures of personal hygiene for improving the conditions found.

c. Discharged conscripts to be urged to seek advice from the Secretary of the Auxiliary Medical Defense Committee of the county of residence as to the best method of procedure for improving their condition and utilizing to the full the knowledge of their impairment.

d. State and Auxiliary County Committees will be requested to accumulate data as to the local facilities for relief and education of these impaired lives and will guide them to the best available channels of relief.

e. Other possible sources of advice and assistance named in the leaflet are: family physician; local hospitals or dispensaries; Y. M. C. A. branches; local medical society; local health department or local health officer; national and local associations for prevention of special diseases —tuberculosis, mental and nervous diseases, cancer—such as

National Association for the Study and Prevention of Tuberculosis, 102 East 22nd Street, New York City. (Instruction and guidance as to best procedure.)

The National Committee for Mental Hygiene, 50 Union Square, New York City. (Advice and suggestions for procedure in nervous and mental cases.)

The American Social Hygiene Association, 105 West 40th Street, New York City. (Advice on social hygiene; best course to follow for cure of disease.)

The American Society for Control of Cancer, 25 West 45th Street, New York City. (Advice and guidance.)

Y. M. C. A. Local Branches. (Physical training, lectures, advice and guidance.)

Health Department, State and Local. (Treatment in some cases, advice and guidance.)

Life Extension Institute, 25 West 45th Street, New York City. (Educational material on keeping well, hygiene, physical examination, report and guidance.)

Special instruction as to communication with these societies and the possible aid to be derived is included.

All rejected conscripts can be to some extent improved even though they may not be made eligible for military service, and this holds good for every citizen.

Contact with these discharged conscripts and the public interest in the vitality of the nation aroused by the draft examinations, should be utilized to the full, and the message of hygienic living carried as far and wide as possible.

MENTAL HYGIENE WAR WORK COMMITTEE

The personnel of The Mental Hygiene War Work Committee of The National Committee for Mental Hygiene is as follows:

Chairman, Major Pearce Bailey, Chief of Service, New York Neurological Institute, New York City

Vice-Chairman, Dr. Frankwood E. Williams, Associate Medical Director, The National Committee for Mental Hygiene, New York City

Dr. Felix Adler, New York Society for Ethical Culture, New York City

Mr. Otto T. Bannard, New York City

Dr. Lewellys F. Barker, Johns Hopkins University Medical School, Baltimore, Maryland

Dr. Albert M. Barrett, Director, State Psychopathic Hospital, Ann Arbor, Michigan

Dr. G. Alder Blumer, Superintendent, Butler Hospital, Providence, Rhode Island

Major L. Vernon Briggs, formerly Secretary, Massachusetts State Board of Insanity, Boston, Massachusetts

Dr. C. B. Burr, Superintendent, Oak Grove Hospital, Flint, Michigan
Dr. Nicholas Murray Butler, President, Columbia University, New York City
Major Joseph Collins, Chief of Service, New York Neurological Institute, New York City
Dr. Owen Copp, Superintendent, Pennsylvania Hospital, Philadelphia, Pennsylvania
Dr. Charles L. Dana, Chief of Service, New York Neurological Institute, New York City
Dr. Walter E. Fernald, Superintendent, Massachusetts School for the Feebleminded, Waverley, Massachusetts
Dr. Shepherd I. Franz, Psychologist, St. Elizabeths Hospital, Washington, D. C.
Major M. S. Gregory, Director, Psychopathic Clinic, Bellevue Hospital, New York City
Dr. Isham G. Harris, Superintendent, Brooklyn State Hospital, Brooklyn, New York
Dr. August Hoch, formerly Director, Psychiatric Institute, Ward's Island, New York City
Dr. George H. Kirby, Director, Psychiatric Institute, Ward's Island, New York City
Dr. Adolf Meyer, Director, Henry Phipps Psychiatric Clinic, Johns Hopkins Hospital, Baltimore, Maryland
Dr. Frank P. Norbury, formerly Alienist of the Illinois State Board of Administration, Jacksonville, Illinois
Dr. Stewart Paton, Lecturer on Neuro-biology, Princeton University, Princeton, New Jersey
Mrs. Henry Phipps, New York City
Dr. William L. Russell, Superintendent, Bloomingdale Hospital, White Plains, New York
Major Thomas W. Salmon, Medical Director, The National Committee for Mental Hygiene, New York City
Dr. E. E. Southard, Director, Psychopathic Hospital, Boston, Massachusetts
Dr. T. H. Weisenburg, President, American Neurological Association, Philadelphia, Pennsylvania
Dr. William A. White, Superintendent, St. Elizabeths Hospital, Washington, D. C.
Major Robert M. Yerkes, Professor of Psychology, University of Minnesota, Minneapolis, Minnesota.

The American Medico-Psychological Association at its annual meeting in June adopted a resolution, directing the president to appoint one member of the Association in each state to co-operate with The Mental Hygiene War Work Committee of The National Committee for Mental Hygiene. The following members were appointed:

Alabama	Dr. J. T. Searcy, The Bryce Hospital, Tuscaloosa
Arizona	Dr. Alfred C. Kingsley, Arizona State Hospital, Phoenix
Arkansas	Dr. James L. Green, Hot Springs
California	Dr. Jau Don Ball, Oakland
Colorado	Dr. Hubert Work, Woodcroft Hospital, Pueblo
Connecticut	Dr. C. Floyd Haviland, Connecticut State Hospital, Middletown
Delaware	Dr. W. H. Hancker, Delaware State Hospital, Farnhurst
District of Columbia	Dr. William A. White, St. Elizabeths Hospital, Washington
Florida	Dr. Ralph N. Greene, Chattahoochee
Georgia	Dr. Wm. A. Ellison, Invalid's Home, Milledgeville
Idaho	Dr. John W. Givens, Idaho Northern Asylum, Orofino
Illinois	Dr. Henry J. Gahagan, State Hospital, Elgin
Indiana	Dr. S. E. Smith, Eastern Indiana Hospital, Richmond
Iowa	Dr. W. P. Crumbacker, Independence State Hospital, Independence
Kansas	Dr. Thomas Biddle, Topeka State Hospital, Topeka
Kentucky	Dr. H. P. Sights, Paducah
Louisiana	Dr. Clarence Pierson, East Louisiana Hospital, Jackson
Maine	Dr. Forrest C. Tyson, Augusta State Hospital, Augusta
Maryland	Dr. Edward N. Brush, Sheppard and Enoch Pratt Hospital, Towson
Massachusetts	Dr. Henry R. Stedman, Bournewood Hospital, Brookline
Michigan	Dr. C. B. Burr, Oak Grove Hospital, Flint
Mississippi	Dr. J. M. Buchanan, East Mississippi Insane Hospital, Meridian
Missouri	Dr. C. R. Woodson, St. Joseph
Montana	Dr. J. M. Scanland, Montana State Hospital, Warm Springs
Nebraska	Dr. W. S. Fast, Nebraska State Hospital, Ingleside
New Hampshire	Dr. Charles P. Bancroft, New Hampshire State Hospital, Concord
New Jersey	Dr. Henry A. Cotton, New Jersey State Hospital, Trenton
New York	Dr. Charles G. Wagner, Binghamton State Hospital, Binghamton
North Carolina	Dr. Isaac M. Taylor, Broadoaks Sanatorium, Morganton
North Dakota	Dr. W. M. Hotchkiss, State Hospital, Jamestown
Ohio	Dr. E. A. Baber, Dayton State Hospital, Dayton
Oklahoma	Dr. John Williams Duke, Duke Sanitarium, Guthrie
Oregon	Dr. Henry Waldo Coe, Morningside Hospital, Portland
Pennsylvania	Dr. Henry A. Hutchinson, Dixmont Hospital, Dixmont
Rhode Island	Dr. G. Alder Blumer, Butler Hospital, Providence
South Carolina	Dr. C. F. Williams, State Hospital, Columbia
South Dakota	Dr. L. C. Mead, Yankton State Hospital, Yankton
Tennessee	Dr. James J. Neeley, Memphis
Texas	Dr. John Preston, State Lunatic Asylum, Austin
Utah	Dr. George E. Hyde, Utah State Mental Hospital, Provo City
Vermont	Dr. Shailer E. Lawton, Brattleboro Retreat, Brattleboro
Virginia	Dr. William F. Drewry, Central State Hospital, Petersburg
Washington	Dr. Robert P. Smith, Seattle
West Virginia	Dr. Charles A. Barlow, Spencer State Hospital, Spencer
Wisconsin	Dr. Richard Dewey, Milwaukee Sanitarium, Wauwatosa
Wyoming	Dr. Charles H. Solier, State Hospital, Evanston

At the annual meeting of the American Neurological Association, a War Work Committee, composed of Dr. E. E. Southard, Chairman, Dr. T. H. Weisenburg, Dr. Charles Frazier and Dr. Daniel J. McCarthy, was likewise appointed to co-operate with The National Committee for Mental Hygiene.

In Massachusetts a Committee for War Work in Neurology and Psychiatry, appointed by Governor McCall and composed of Dr. George M. Kline, Chairman, Dr. L. Vernon Briggs, Dr. John A. Houston, Dr. Walter E. Fernald, Dr. Elisha H. Cohoon, and Dr. James B. Ayer, is also co-operating.

The initial work of The War Work Committee of The National Committee for Mental Hygiene was made possible through a generous gift made by Miss Anne Thompson of Philadelphia, daughter of the late Frank Thompson, formerly President of the Pennsylvania Railroad.

The Sub-committee on Clinical Methods and Standardization of Examinations and Reports of The Mental Hygiene War Work Committee of The National Committee for Mental Hygiene is as follows: Dr. August Hoch, Chairman; Major Pearce Bailey, Washington; Dr. Albert M. Barrett, Ann Arbor; Major Joseph Collins, New York City; Dr. Walter E. Fernald, Waverley; Dr. George H. Kirby, New York City; Dr. Adolf Meyer, Baltimore; Major Thomas W. Salmon, Washington; Dr. E. E. Southard, Boston; Dr. T. H. Weisenburg, Philadelphia; Dr. William A. White, Washington; Dr. Frankwood E. Williams, New York City; Major Robert M. Yerkes, Washington.

Neurological centers have been established both by the French and English War Departments immediately behind the fighting line. Here quick returns are the order of the day. According to Colonel Sir John Collie, the atmosphere in which the shell-shocked soldier is treated is second only in importance to the personality of those who are to treat him. In these front-line neurological centers the treatment is more intensive, but the feature which distinguishes it from the means employed at home is that the cases are taken, as it were, red-hot from the battlefield, and are moulded by the strong will of those specially selected for their treatment. Frequently men are returned to the fighting line in two or three weeks. (Contrast this with the unfortunate experience of those who find themselves for a period extending to even twelve months in some eight or nine different hospitals, perhaps some of them V. A. D. hospitals.)

There is a special shock hospital for each army area. They are placed near the clearing hospitals, and are staffed by specially selected medical officers under the superintendence of a neurologist of repute. Here the case is thoroughly investigated, and, if it is found that the man is not likely to recover soon, he is sent to a base hospital, from which in time he may be transferred to England. Numbers of men treated at these special hospitals are found after one, two or three weeks' treatment to have sufficiently recovered to be transferred to a local convalescent camp, where attention is specially paid to them as convalescent neurasthenics. Appropriate exercises are prescribed and, later on, football and competitive games of skill are encouraged.

BOOK REVIEWS

TRUANCY AND NON-ATTENDANCE IN THE CHICAGO SCHOOLS. A Study of the Social Aspects of the Compulsory Education and Child Labor Legislation of Illinois. By Edith Abbott, Ph.D., and Sophonisba P. Breckinridge, Ph.D. Chicago: The University of Chicago Press, 1917.

This book is an outgrowth of some work which began as a study of the delinquent children at the Juvenile Court of Chicago. The study of the truant and dependent children led the authors into the larger problem of school attendance and an investigation of the operation of the child labor laws. The first part of the book reviews the legal aspect of compulsory education and the gradual development in Illinois of legislation safeguarding the children from industrial exploitation and providing educational opportunities for them. The second part of the book deals with the extent of truancy and non-attendance in Chicago and sets forth the results of the study of the reasons for non-attendance. The authors emphasize the fact that this is a home problem and not one which can be solved merely by a study of the children, or the schools, or the teachers.

The parental school was found to have done excellent work and to have been much appreciated by the parents. On the other hand, the parental school is so costly that its equipment should not be used except for cases that cannot be handled otherwise, and attention to truancy at its source in the home might in many cases lead to a more economical handling of the situation and spare the parents the distress of separation.

The authors recommend that school visitors or visiting teachers should supplement the work done by the officers of the department of compulsory education. They give many convincing examples to show how useful such workers would be.

In a chapter devoted to the summary and conclusions, the authors outline the various statutory changes which they feel would increase very greatly the efficiency of the educational system in Chicago. Their suggestions include among others that the age of lawful employment of children be raised to 14 or 16 years, that the issuing of working papers, now the duty of the local school superintendents, be made a function of the state department of education, and that these working papers should be issued under more stringent restrictions than at present. Provision should also be made for special continuation schools.

The book does not deal with the individual truant but rather with the social aspects of the situation. Nevertheless, the authors in the course of their discussion show that they have excellent insight into the needs of the individual child. The book is well arranged, the subject matter is systematically presented, and the results of a very thorough and painstaking investigation are formulated in a manner which enhances their value.

C. Macfie Campbell.

Genetics and Eugenics. By W. E. Castle. Cambridge: Harvard University Press, 1916.

The author has essayed to present in a simple and readily intelligible form the subject of heredity in man and the domesticated animals and plants. The history of evolutionary theory is briefly sketched, a chapter each being devoted to biometry, to the mutation theory and to Mendel's law. Some applications and later developments of Mendel's law are set forth, and then five chapters are devoted to unit characters in various groups of animals. The recent demonstration that the germinal determiners for characters lie serially arranged in the chromosomes, and the facts of sex-linked inheritance are treated in three chapters; and the question of the variability of unit characters and the universal applicability of the theory of discrete units in heredity are discussed in three chapters more. Finally about 45 pages are devoted to heredity in man.

In many respects Castle's book has achieved his aim. It is well written, illustrated by 135 figures and a colored plate, is accompanied by a bibliography of 25 pages and a translation of Mendel's famous paper, and is published in the best fashion. To every one who wants a readable account of progress in modern genetics this book may be recommended. Yet the writer feels that it has certain clear limitations. The first arises from a failure to clear the boards at the outset of the rubbish of popular nomenclature and false ideas about heredity that have come to us from an earlier time. It is not a concession to didactic needs but an admission of a sort of intellectual inertia to speak of "the influence which parents exert on the characteristics of their offspring" (p. 3) as the main scope of genetics. Now the only influence that any parent exerts on its offspring is as *nurse;* and this influence is not what is meant by heredity.

Unfortunate, also, is Castle's use of "Mendelian" as a name for modern genetical analysis. It is clear that modern genetics has gone far beyond anything that Mendel conceived. There is no desire to belittle Mendel's part in laying the foundation for modern genetics, but it is as unfortunate to speak of Mendelian heredity as of Hippocrotean medicine or Galenical anatomy for these sciences in their modern development.

Equally unfortunate for clear thinking is the rejection by the author of distinct terms for somatic traits and the germinal "determiners" ("factors," "genes") out of which they develop. If the "unit characters" about which we talk are the "hypothetical determiners," then we would do well to abandon the term unit character, and recognize that we have characters—like eye color—that depend on *one* determiner; others, like negro skin color, that depend on two similar determiners and others, like some kinds of hair color, that depend on two or more dissimilar determiners. Perhaps we need a new term for somatic characters that have a tested *genetic* basis; we might call them *somates*. Then we would recognize simple somates, compound somates, and complex somates according to the demonstrated genetic composition.

For readers of MENTAL HYGIENE, Castle's attitude toward eugenics will be of especial interest. Reference may be made first to Castle's criticism that the method of collecting data at the Eugenics Record Office is biased by Mendelian prejudices. Such a charge can be based only on entire ignorance of how the data are collected; the criticism is only a faint echo of the Pearson-Heron outpouring of "spleen" (*epinephrin*) which certainly was not based on first-hand knowledge. One might just as well reject all anamneses on the ground that the physician who took them had been trained in psychiatry! After reviewing some of the findings on heredity of human traits, Castle discusses "The Possibility and Prospects of Breeding a Better Human Race." Here he quotes at length, with apparent approval, from Cattell's study of the families of 1,000 American men of science. But Cattell lays rather more emphasis on "circumstances" in producing the result than a more complete analysis of the facts seems to warrant. It is by co-operation of the rifle barrel and the charge that the steel bullet is propelled a mile in nearly a straight line. It is natural that the arms maker should lay stress on the importance of the gun barrel and that the munitions maker should lay stress on the explosive charge. Both are just as important as possible and it is foolish to try to minimize either. Sociologists have in the past erred grossly by assuming that persons are born equal and that the differences in their output are to be ascribed to conditions of life. Biologists may have over emphasized the determinative nature of the genes. In trying to avoid the latter error Castle has, we think, leaned too far backward.

C. B. DAVENPORT.

DER ANGEBORENE SCHWACHSINN IN SEINEN BEZIEHUNGEN ZUM MILITÄRDIENST. By Theophil Becker. Berlin, 1910.

EXPERTISE PSYCHIATRIQUE DANS L'ARMÉE. (In Précis de Psychiatrie.) By E. Régis. 5th ed. Paris, 1914.

MILITARY PSYCHIATRY. By R. L. Richards, Captain, Medical Corps, United States Army. American Journal of Insanity, July, 1910.

A review of these books—which are not of very recent publication—is undertaken here because they deal with a subject that has assumed an unwonted importance for us since this country has become involved in the great war.

In armies, as in civil life, an apparent, progressive increase of mental disorders has been observed for a number of decades past. This is now generally attributed to the gradually developed, more exacting standard of living and service, increased hospital facilities, and improved methods of diagnosis and observation. The increase is well shown in the German army statistics cited by Becker, from which the following figures have been abstracted:

Fiscal years	1874–75	1879–80	1884–85	1889–90	1894–95	1899–00	1904–05
Cases of mental trouble per 1,000 of effective strength..	0.21	0.28	0.33	0.35	0.48	0.60	1.10

It may be noted, in passing, that even the more recent statistics represented in this table show a striking rarity of mental disorders in contrast with corresponding statistics for the armies of the Allies during the present war. But it must be remembered, on the one hand, that the German army has long taken special pains to exclude mentally abnormal persons, and, on the other hand, that the incidence of mental disorder in armies in times of peace is lower than in times of war.

Mental cases in the German army, reported in the fiscal year 1905–1906, total number 1,190, have been classified, according to Becker, essentially as follows:

	Per cent
Mental deficiency	51.7
Dementia praecox	17.1
Constitutional psychopathics	8.4
Epilepsy	5.8
Manic-depressive psychoses	5.6
Acute hallucinatory states	3.4
Hysterical psychoses	2.5
Paranoia	1.5
General paresis	1.0
Alcoholic psychoses	0.6
Traumatic psychoses	0.5
Unclassified	1.9

A significant point made by Becker pertains to the progressively diminishing rate at which psychiatric cases were brought to light in the four quarters of the first year of military service: 37.8 per cent in the first quarter, 28.2 per cent in the second, 21.6 per cent in the third, and 12.4 per cent in the fourth.

In the army, as in civil life, psychiatrists are not infrequently confronted with doubtful or borderline cases in which the question of permitting or not permitting continuance in the service presents special difficulties. The last and, at the same time, the most trustworthy test in such cases is that of further service; of six cases mentioned by Becker, provisionally classed as fit and returned for such test, three eventually remained in service and three were discharged as unfit.

A large part of the book is devoted to methods of investigation and diagnosis all of which are borrowed from current civilian psychiatry. A great point is made of examining all cases showing striking defects or peculiarities of writing, either in content or in form; and a further point is made of the need of provision for detention of patients for psychiatric observation.

Turning to Régis' book, we find equally clear recognition of the need of psychiatric service in armies and navies based on extensive experience represented by a number of studies referred to in the text. It was such recognition that led, early in 1913, to the issuance of an official bulletin by the French War Department providing for: "1. Psychiatric instruction of army surgeons. 2. Army surgeons specialized in psychiatry. 3. The assignment to military organizations of specialists in psychiatry. 4. Psychiatric examinations for exemption boards. 5. Similar examinations in connection with voluntary enlistments, conscripting of troops, and in the course of service. 6. Expert consultation before court-martial."

A remarkable contrast is pointed out in the relative frequency of the various forms of mental alienation as occurring in officers and in enlisted men. "The most frequent mental affection among the officers is, by far, general paresis." Among enlisted men "degeneration" (constitutional disorders) predominates: unbalanced, eccentric, feeble-minded individuals, often presenting complications in the form of alcoholism, epilepsy, hysteria, neurasthenia, obsessions, dementia praecox, etc.

Régis approvingly cites the recommendation of Jacoby—growing out of experiences in the Russo-Japanese war and for the first time carried out during that war—that either psychiatric hospitals be established for use during campaigns at points conveniently accessible to the field of operations, or special pavilions in connection with field hospitals.

Richards, too, emphasizes the need not only of psychiatric service for armies in times of peace but also of special provision for the care of the greatly increased numbers of psychiatric cases in times of war, especially during active campaigns. "Psychiatrists (Oserezkowski and others) report that during the Russo-Japanese war they saw insane wandering about everywhere, in spite of the best psychiatric organization the world has ever seen. In one instance a whole regiment of Russians became infected with the fear that the Japanese having stopped their advance were about to open upon them with artillery fire. Officers and men ran as best they could for twenty-four hours, until checked by the main column. Psychic infection from the weaker ones seems the most reasonable explanation of this most remarkable occurrence. The large number of hysterical and exhaustion psychoses observed by the Russians show us what preparations we must make in the event of a modern battle. We know of no means of preventing the presence of some psychical weaklings at such a time. Even if it be a fact that they recover promptly, it is also admitted that they are especially liable to a recurrence if placed again in the same circumstances."

It is the observation of all authors that a large proportion of cases of mental abnormality in military organizations come to light through delinquencies. Richards states: "Of 500 discharges of soldiers coming directly from the ranks to the Government Hospital for the Insane in the period 1860 to 1909, I find that 12.6 per cent were 'dishonorable,' or 'without honor' discharges, or had records of military offenses, chiefly desertion."

"The offenses recorded in the 500 discharges mentioned above, were as follows:

Desertion	49
Absence without leave	26
Assaulting officer or comrade	21
Fraudulent enlistment	8
Larceny	2
Selling clothing	1
False official statement	1
Disobedience of orders in war time	1
Embezzling	1
Rape	1
Disability, result of own misdeeds	7
Not specifically designated	20
Total	138"

It would seem clear from all this—even independently of the more significant, recent experiences—that military organizations can no longer afford to neglect their psychiatric problems in times of peace and that these problems assume a special magnitude and urgency in times of war, particularly during active campaigns.

The more specific indications are also quite clear:

1. Opportunities for large economies in time, labor, expense, and even human life are to be found in psychiatric service in connection with recruiting.

2. Similar opportunities are to be found in training, mobilization and concentration camps. In connection with such camps places of detention with proper equipment for psychiatric observation should be provided. An adequate force of psychiatrists and medical and lay assistants should be available for such work.

3. Continued provision for psychiatric service, subsequent to the periods of training and mobilization, should also constitute an integral part of the work of the medical corps.

4. Psychiatric pavilions should be provided in connection with field and base hospitals.

5. Psychiatric service should be made available for all cases of delinquency in military organizations.

6. Provision should be made for returning from the war zone to hospitals at home, under proper care and custody en route, of such mental cases as cannot be returned to the ranks.

A. J. ROSANOFF.

MORAL SANITATION. By Ernest R. Groves, Professor of Sociology, New Hampshire State College, Durham, N. H. New York: Association Press, 1916. 128 p.

This little book belongs to a class of literature which is constantly becoming more abundant and which emphasizes a very healthy attitude on the part of those people who desire knowledge about themselves that will be helpful in the practical problems of living.

Professor Groves hardly claims to have written a treatise on moral sanitation. His book is more of a running commentary or a collection of thoughts, designated as chapter headings, bound together by the comments of a man who has read widely and thought much over the problems of human conduct. He believes profoundly that in a scientific study of man's behavior ought to be found the principles upon which efficient living must be based and that these principles are to find their way into the highways and byways of social life, into the factory and be applied by the workman at his task, into the family and be applied by the parents in the education of their children, into the church and provide the reasons for its moral precepts, in fact, into every place where man's activities carry him. Professor Groves' attitude toward conduct is wholesome and constructive. He believes that a man is entitled to the privilege of wholesome work in which he finds self-expression and to the boon of happiness and that the really great social problems that confront us are perhaps the very ones of providing a means to these ends.

Professor Groves, like many another broad-minded man, has come to believe that the principles worked out by Freud and embodied in the methods of psychoanalysis can no longer be neglected by the moral teacher who desires to do the best that can be done, that the psychoanalytic principles, in other words, throw a light upon the springs of human conduct, which it is invaluable to know about if we are to improve our ways of living.

WILLIAM A. WHITE.

THE PSYCHOANALYTIC METHOD. By Oskar Pfister, translated by Charles R. Payne, M.D. New York: Moffat, Yard & Company, 1917. 588 p.

This work represents the most ambitious attempt that has been made to review thoroughly the whole psychoanalytic movement, particularly its therapeutic aspect, in the light of personal experience. Pfister considers the subject in its various ramifications and details, both in theory and in practice, enriching it with a large amount of case material. Like all comprehensive works, it might be criticized here and there, but as a whole it is a monumental and valuable work. Credit should also be given to the translator for a difficult task well done.

The author is not a physician, but a pastor and a pedagogue and his primary interests radiate from these two viewpoints. His cases, therefore, are drawn largely from among children or young adults. To those who see in the psychoanalytic movement a moral menace this work should be an enlightenment, showing, as it does, the minister and the teacher going among his people and his children, helping them in their distress, using the principles and the technique of psychoanalysis, yet dominated by the highest religious and educational ideas.

The latter part of the work, in which the author deals specifically with the problems of religion and of education, is perhaps the happiest. He sees in the teachings of Jesus what he believes to be perfectly expressed truths and what the psychoanalysts have seen for many years, namely the articulate wisdom of the folk soul. His discussion of the problems of education should be read by the teachers and superintendents of every institution that cares for children. The ineffectualness of approaching the difficulties of children—or of adults, for that matter—solely at the conscious level needs to be emphasized again and again. This is particularly true in the matter of corporal punishment, which not only fails to convince the one on whom it is inflicted, but is liable to produce positive injury by creating emotional reactions which serve still further to cripple the individual in his dealings with reality. The book deserves a wide reading.

WILLIAM A. WHITE.

THE DEVELOPMENT OF INTELLIGENCE IN CHILDREN (The Binet-Simon Scale) and THE INTELLIGENCE OF THE FEEBLEMINDED. By Alfred Binet, Sc.D. and Th. Simon, M.D. Translated by Elizabeth S. Kite. Publications of the Training School at Vineland, New Jersey, Department of Research, Nos. 11 and 12. Baltimore: Williams and Wilkins Company, 1916.

These two volumes bring together a series of articles published by Binet and Simon in *L'Année Psychologique* during the years from 1905 to 1911 inclusive, and dealing with the development and application of the scale which bears their names. The first volume deals primarily with the development of the scale, while the second consists of discussions of mental development, defect, and disease in which the scale is utilized. The chronological arrangement is followed except that the contents of the second volume belong to the years 1908 and 1909 and therefore antedate the concluding paper of volume one.

The first three chapters treat of the 1905 tests. The situation which confronted the authors is described. Want of precision both in defining terms and in describing symptoms had resulted in a chaos of inconsistent findings and unreliable statistics, and made it impossible to determine the effect of any treatment. The history of the subject is taken up showing that while the problem is essentially psychological, the practical judgment of any particular individual was based upon medical symptoms and frequently upon non-essentials. The comments on Sollier's suggestion that defectives should be classified on the basis of attention is interesting in connection with the authors' own treatment of that topic in one of the later articles. Dr. Blin's program of examination is reproduced in full.

Before presenting their own series of tests, they carefully delimit the problem, both as to subjects and functions to be studied and as to methods to be employed. Their conception of a measuring scale is explained, and it is noticeable that the idea of groups of tests corresponding to different mental levels had already taken shape in their minds although the tests were not published in that form until three years later. The trying out of this first series with both normals and subnormals is described in considerable detail, showing how the various age groups were differentiated.

In Chapter IV we have the 1908 scale, where the tests first appear in groups corresponding to ages, and the first rules for computing mental age are laid down.

Chapter V gives the 1911 revision of the scale, the form in which it was left by Binet at his death. Other topics of practical interest are discussed, such as the relation of social and scholastic status to intellectual level; various criticisms are answered; and the "principle of multiplicity of tests" is emphasized.

The second volume opens with a discussion of the intelligence of the feebleminded under many aspects, and a "scheme of thought" is propounded.

Part II proposes "a new method of psychogenesis" by which defective subjects are to be utilized for prolonged or repeated experiments in which, if normal children were studied, the results would be vitiated by the fact that the mental status of the subject would not remain constant. The method is illustrated by a study of language development in an imbecile.

In Part III the feebleminded are compared with general paralytics and dements in considerable detail as regards the mental level, the functioning of the intelligence, and the instinctive and ideational aspects of mental life.

The multiplicity of details in these volumes and the very considerable repetitions are wearisome, but they are inevitable in such presentation of the subject. Departures from the customary phraseology constitute a difficulty which many readers will not find compensated by gain in clarity. Thus, "image" is apparently limited in meaning to visual and auditory imagery of the concrete type, "image" and "word" are opposed to each other, kinaesthesia is barely recognized, and "perception" is used to denote sensory discrimination. A further source of obscurity is the peculiarity of arrangement, or perhaps lack of arrangement, which occasionally makes it difficult to interpret the text or to turn readily to a desired topic. At times, also, when a single case is under discussion it is difficult to decide whether it is presented as a case study or as typical of a group of individuals.

With all their difficulties, however, these volumes will be welcomed by many readers. The examiner will find much that is helpful in the detailed presentation of individual cases, as well as in the practical recommendations. Whatever the present value of the Binet-Simon Scale, it should be seen in the light of its authors' intention and against the background of the situation as they found it. Moreover, in science, as well as in industry, the by-products of one invention provide the material and the point of departure for the next, and these records abound in observations carefully noted but utilized imperfectly, or not at all, because not bearing directly upon the problem of the type of age-scale which these investigators had set themselves to construct. Even those who read French easily and have access to special libraries will be glad to have this material put into compact shape and made available for their own bookshelves.

ROSE S. HARDWICK.

HOSPITALS AND THE LAW. By E. V. Mitchell, LL.B. New York: The Rebman Company, 1915.

The author reviews briefly the history of hospital development discussing the institution from a legal viewpoint as contrasted with the medical aspect. At greater length he discusses the nature of corporations, distinguishing clearly between public and private ones. A further distinction is drawn between eleemosynary hospitals and others.

A hospital must be conducted with reasonable skill, care and diligence, and its patients are entitled to competent medical advice and treatment. The purely charitable institution, however, is not liable for the negligence of its servants, provided due care is exercised in their selection. No uniform decision has been reached as to whether the hospital is answerable for injury to others than patients.

The maximum care must be exercised in the systematic keeping of records inasmuch as they may become of great legal importance. This point is well emphasized by a few illustrations. The records are immune from disclosure except in states where the common law has not been modified by statute; under the common law, disclosures to a physician are not protected. In casualty cases, an interested party may have the record introduced into court by legal process.

The law governing the holding of post-mortem examinations is made very clear, but there is no discussion in regard to obtaining consent for operations nor as to what the duty of the physician is when unexpected conditions are discovered during an operation. No man may be restrained of his liberty illegally; even his signing an agreement to remain does not justify the officials in detaining him. On the other hand, a hospital may be remiss in discharging a patient prematurely, although the institution is not liable for error in judgment. The statutory qualifications for holding a state hospital office are reviewed. There is a timely warning against any unneutral attitude on the part of officials and attendants toward legal matters of a patient.

Hospitals are usually incorporated and subject to visitation by state authorities, some person or board designated by the founder, or by the founder himself and his heirs. The right to establish a hospital cannot be prohibited nor can oppressive and unreasonable regulations be imposed. Hospitals for contagious diseases may be established by public health departments when necessary.

The liability of relatives, employers and others for the support of patients is briefly outlined. The book closes with the presentation in full of two chapters of the Geneva Convention of 1906, relative to naval and military hospitals.

The legal principles involved are sound; but there is considerable repetition and use of long, though interesting, statements of fact, quoted testimony and decisions. The exemption from liability of the managers of charitable hospitals for the misfeasances and nonfeasances of the employes is ably discussed, and the rule that they are liable only for negligence in the choosing of the employes, a point which has not been so well settled in England as in this country, is clearly stated and well illustrated. But just how far the members of the staff come under the title of employes is not discussed. The degree of care legally required of a nurse, which does not mean the highest possible degree, but what a well-trained nurse would do under the cirumstances, follows the general principles of law relating to negligence.

The ruling of the California courts in declaring that the licensing provision in that state constituted an arbitrary exercise of the police power is very unfortunate, and is a good example of a situation which so frequently arises in the United States, that is, a court's declaring that the legislative body erred in the determination of a fact, and substituting its own determination for that of the legislature.

The chapter on Remuneration and Support fails to touch upon many important points. The questions of how far negligence or failure to effect a cure bars a claim for fees and whether recovery should be had for the performance of operations and rendering of services the usefulness of which is doubtful, as well as many other similar questions relating to remuneration, might well have been included here.

It may be confidently stated that any one connected with a hospital, in an official or advisory capacity, unless he is already versed in matters covered by this book, will be well repaid for reading it.

SAMUEL W. HAMILTON,
ROY HABER.

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